The Week In Engineering and Construction

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Postwar housing needs of 40 billion seen as outcome of war activity

Head of Commerce Department construction staff tells Producers' Council that present surveys indicate need for four to five million houses in postwar economy, challenging industry to produce

Four to five million houses, or about $40,000,000,000 in construction and materials cost, are foreseen as one potential market for the construction industry by 1945, if full employment can be maintained, S. Morris Livingston, chief, Construction Staff, Department of Commerce, told members of the Producers Council in an annual meeting at Detroit June 23.

Mr. Livingston said his forecast was based on taking an arbitrary period—the year 1945—as a safe future time on which to examine housing developments. He said it is to be hoped that the war will be over by that time. The total expenditure would extend over a period of years beyond 1945.

"The postwar production of goods and services must offer full employment to those of our people who will then want it," Mr. Livingston said. "The armament program has taught people the tremendous productive capacity of this country, if the demand exists. They will insist on a solution of the problem of distributing this large output in peacetime. They will hold that widespread unemployment is the greatest economic waste and must be eliminated.

Challenge to private industry

"If our present economic system and form of government are to be maintained, this problem must be solved in the field of private enterprise. Of our output over the next 12 months, perhaps 60 billion dollars will be war goods. When that market disappears, no public works reserve or other make-work program will be adequate to fill the gap. The successful transition from a war economy and the maintenance of a high level of consumption will require the joint efforts of government and industry.

"In order to balance the decline in armament expenditures, it has been indicated that we need about five billion dollars per year of residential building and an equal amount of all other private construction. In addition, there are ample possibilities for postwar public construction totalling three billion dollars per year without engaging in any make-work program. This construction can be of a type which will encourage, rather than stifle, private enterprise. For example, highway construction does not compete with private enterprise.

A growing market

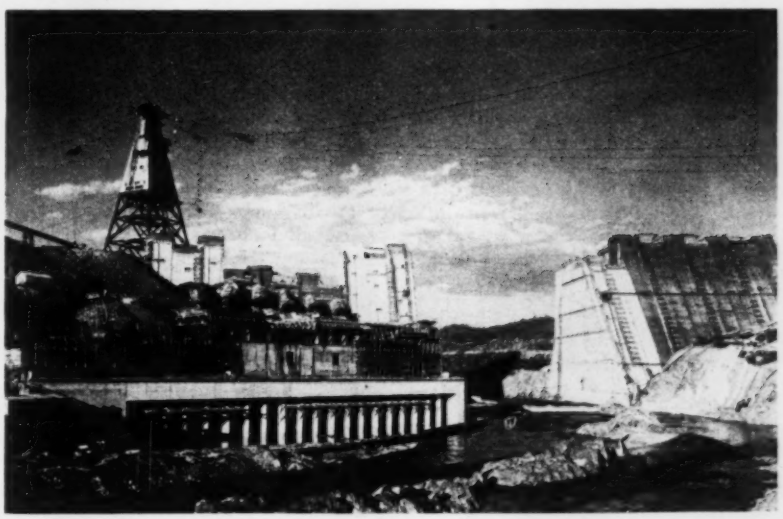
"As to the potential housing market, and indirectly the demand for new residential construction . . . in April, 1930, there were 23.2 million non-farm households. When the census was taken in April 1940 there were 27.7 million such households. By 1945 there will be about 31.5 million such households.

With an estimated 60 percent increase in total income between 1940 and 1945, there will be a consequent shift of effective demand to the higher priced classes in housing. First effect of this demand would be to force a markup of the prices of existing structures but this marking up of prices would not limit the market for new construction. Under the assumed conditions, new building could compete on a favorable basis for the greatly enlarged residential market.

"With allowances, the potential market with full employment in 1945, is 4 to 5 million dwellings, most of them costing $5,000 or more. Deducting value of the site, this is a total construction cost of over 30 billion dollars."

Mr. Livingston said that the 30 billion dollar figure is far beyond the annual capacity of the construction industry, which in its biggest year produced less than one million dwellings. He said, therefore, that the resulting new construction would necessarily be spread over a period of years. Meanwhile, further increases in population are expected to add to the demand at the rate of perhaps half a million dwelling units per year.

Other sources of continued activity for construction, Mr. Livingston said, would be necessity of replacement of existing dwelling units, already in poor condition but whose replacement is not possible at this time under the strictly controlled priority system.

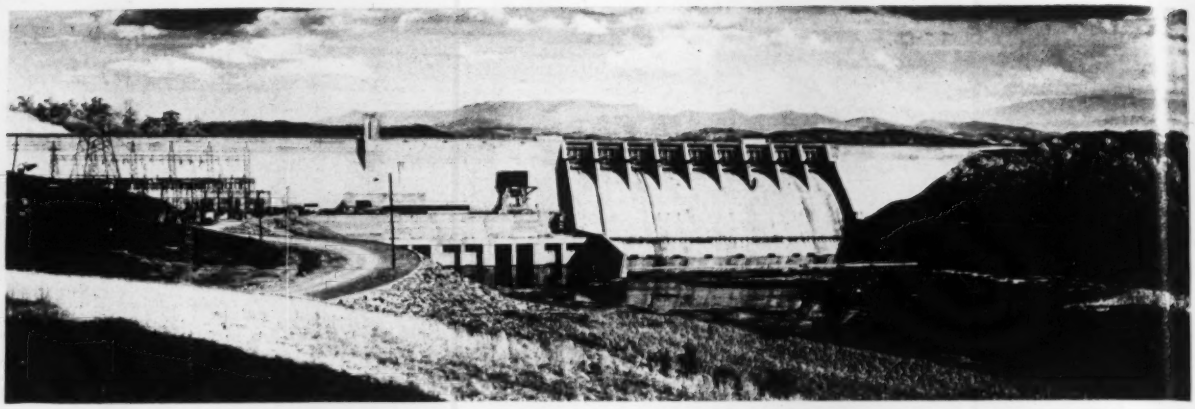


Shasta Dam power plant emerges from scaffolding

The power plant at Shasta Dam, adjacent to and parallel with the river channel shown above, is beginning to emerge from its cover of scaffolding as work on the project is rushed toward completion.

When completed, the plant will contain five 75,000 kw. generators, each driven by a 103,000 hp. hydraulic turbine.

The 15-ft. penstocks are shown at top left, as they emerge from the dam proper to descend to the power house on the river edge below the dam.



Trick picture shows how Douglas Dam will be near duplicate of Cherokee

The TVA plans to build Douglas Dam on the French Broad River in 13 months, compared to the record-breaking 16 months required for Cherokee Dam on the Holston River, because the dams are near duplicates. Just as scissors and paste made the above illustration by fitting an actual picture of Cherokee to a view of the Douglas site, so TVA engineers have utilized the actual Cherokee designs for Douglas. By working 52 hr. a week, George R. Rich, chief design engineer, and his staff, turned out designs and specifications so fast that all essential equipment and material orders were in the factories 5 weeks after the project was authorized on Jan. 30, 1942, an achievement that elicited high praise from T. B. Parker, TVA's chief engineer. A substantial part of the 3 months saving over the Cherokee schedule was thus effected in the design office. The remainder will result from utilizing the entire Cherokee construction plant at Douglas and by speeding up the concreting as a result of the "know-how" learned on Cherokee.

While no two dams are ever exactly alike, there is unparalleled similarity between Cherokee and Douglas. The length of Cherokee's concrete section fits the width of the French Broad at the Douglas site almost exactly. Streamflow is greater at Douglas, but by the addition of two spillway openings the Cherokee spillway designs, including the gates, can be used. There is not enough difference in head but that the same generator and turbine designs apply, and the tailwater range is sufficiently similar that the Cherokee powerhouse design can be duplicated at Douglas. Flood storage being similar, the same sluice gate designs can be used.

Douglas Dam, a concrete gravity section 760 ft. long and 150 ft. high, will be ready to impound next winter's flood waters, and soon thereafter to turn out 90,000 to 100,000 kw. of war-industry power. All construction is being down by TVA's own forces.

Place 49,005 more war houses under contract

Doubling the record of the previous month, the Federal Public Housing Authority said last week that it had placed under contract a total of 49,005 public war housing units during the month of May. This single month's total was said to exceed the amount of public housing provided during the first World War.

Included in the May total were 41,635 family dwellings, dormitories for 6,470 persons, and 900 trailers. The FPHA had said previously that it was calling for an average of 25,000 units per month as a goal. The May total exceeds the goal by 96 per cent.

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Only one bid submitted on Texas seawall work

The city commission of Aransas Pass, Tex., said last week it had received only one bid for construction of an earthfill seawall on its Gulf waterfront. The bid was submitted by the Gulf Coast Dredging Co. of Texas City, for $303,970.

Construction of the new seawall was made possible through remission of five-ninths of the ad valorem taxes of San Patricio County to the city.

Remove North Carolina ferry route tolls

Governor J. M. Broughton of North Carolina announced last week that the tolls have been removed from ferries across Croatan Sound and the Alligator River in the eastern part of the state. Removal of the tolls leaves North Carolina free of any toll roads, bridges or ferries on its highway system.

To compensate the owner for removal of the tolls on the two ferry lines, the state has agreed to continue paying a subsidy of $700 a month, and in addition to pay all tolls which otherwise would have been paid by passengers.

Passengers will be required to register, but there will be no charge to them. The ferry routes are located on U. S. Highway 64 between Roanoke Island and Columbia, N. C.

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Feldspar found effective against incendiary bombs

Feldspar, a constituent of a large variety of common rocks, has been found to be a cheap and easily obtainable material effective against incendiary bombs, the U. S. Geological Survey announces.

Geologist W. W. Rubey, and Chemists Michael Fleischer and J. J. Fahey were credited with the discovery. In a report by Harold L. Ickes, secretary of the interior, it was said that feldspar, ground to pass a 10-mesh screen and be retained by a 200-mesh screen, would involve least expenditure for material and equipment and is as nearly foolproof as possible in handling.

Tests have shown that when a magnesium bomb was ignited and placed on a pine board or floor and covered with ground feldspar, the fire was extinguished so quickly that the wood was charred only to the depth of half an inch.

In order to protect the public interest, the department will obtain a Government patent for the process, and will make the process available to commercial concerns.

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Mexico plans building three new hospitals

Plans for construction of three new hospitals under federal sponsorship were announced by the Mexican Ministry of Public Welfare last week.

The work would include a 300-bed public general hospital at Hermosillo, capital of Sonora, to cost $190,000; a 500-bed public general hospital, to cost $1,150,000 at Vera Cruz, and a $130,000 tuberculosis hospital at Ximonco in Vera Cruz.

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FPC cuts Niagara Power's valuation by $15,787,688

Ending a 20 year controversy, the Federal Power Commission last week fixed the "actual legitimate original cost" of the Niagara Falls Power Company's power plants at Niagara Falls, N. Y., at $24,680,680 as of March 2, 1921, exclusive of $3,985,500 reserved for further consideration, which represents the book cost of lands, interest and the purchase of a flour mill. Under the terms of the order, $15,537,943 of the book cost of $44,453,868 is to be removed from the fixed capital account and placed in the company's earned surplus account.

By this decision, following closely a recent and similar ruling in the case of the Alabama Power Co. (*ENR*, Apr. 16, p. 591) and in line with a Supreme Court decision with respect to the commission's powers (*ENR*, Mar. 19, p. 443), the commission rejected the company's contention that it properly received a "fair value" license under Section 23 of the Federal Water Power Act instead of a license providing for determination of "actual legitimate original cost."

The decision held that the company did not possess any valid existing permit, right-of-way, or authority from the federal government on July 3, 1920, when it applied for a license.

In disallowing over $15,000,000, the commission said that this represented write-ups placed on the books of the licensee's predecessor companies which were consolidated into the present company by a special act of the New York State legislature. It stated that the record clearly shows that the book cost of the Schoellkopf properties was increased $11,800,482 in intercompany mergers, which had removed the greater part of those properties from the jurisdiction of the New York Public Service Commission. "In other words, having erroneously assumed ownership of the water power inherent in the waters of Niagara, and having effectively removed their activities from public regulation, the Schoellkopfs wrote up the book costs of their properties to the extent which their unregulated future profits appear to justify. A mere flagrant example of outright inflation has seldom come before us."

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Large drydock being built in South Africa

A graving dock, 1,000 ft. long, 150 ft. wide and 45 ft. deep, is being built at Cape Town, South Africa, at a cost of $8,000,000. Under an agreement between the Union of South Africa and the British Government the latter undertakes to provide all the machinery and caissons for the dock, a contribution valued at $3,000,000.

Work is now under way inside a rubble wall that will rise to about 8 ft. above the water. Inside the wall a cofferdam will be sunk to protect excavation into the solid rock of the site.

The excavation work now under way is being done by a Dutch firm that has been dredging in the harbor for the last four years. Most of the material and labor employed will be South African and the dock is expected to be completed within the next three years.

WASHINGTON HIGHLIGHTS

THE PRESIDENT has approved construction of Deerfield Dam on the Rapid Valley Project in South Dakota as a wartime project of the Bureau of Reclamation. The dam will be an earthfill structure of 15,000 acre-ft. capacity, to supply supplemental water for irrigation, and to increase the municipal water supply for the city of Rapid City. The dam may be constructed with WPA labor, which is understood to be available in the area.

THE Department of Interior appropriation bill for the fiscal year 1943, carrying about $90,000,000 for construction by the Bureau of Reclamation, is expected to receive final approval by the two houses of Congress this week. Principal reclamation items in disagreement, it is understood, are the Senate proposals for $200,000 to complete engineering plans for a steam plant for the Central Valley Project in California, and the reinstatement of a previous appropriation of $3,723,000 for transmission lines for this development. The House had previously eliminated the appropriation for the transmission line and had declined to approve any appropriation for the steam plant.

NOMINATION of Abe Fortas, director of Division of Power, Department of Interior, as Under Secretary of Interior, has been approved by the Senate Committee on Public Lands.

Army blows up Ohio highway bridge to show demolition methods

A blast set off by Army engineers recently completely wrecked this 56-ft. bridge, 4 miles south of London, Ohio, to give the department of highways' disaster unit a realistic opportunity to swing into action.

The bridge had been standing for many years on State Route 56, and was so weakened that its removal was necessary. The explosion was planned and carried out by U. S. Army engineers attending a "Demolition School" at nearby Ohio State University. So far as is known, this was the first time since the nation has been at war that a bridge has been blown up to provide defense organizations with an opportunity of gaining actual experience under emergency conditions.

As soon as reports that the bridge had been destroyed reached the state highway patrol, J. Perry Shumaker, chief engineer for Division 5, sent out word of alleged sabotage. The Disaster Unit in Madison County (where the blast occurred) rushed to the scene followed by auxiliary police from Madison, Fayette and Franklin counties, who set up temporary detour signs and kept throngs from the scene of the explosion.

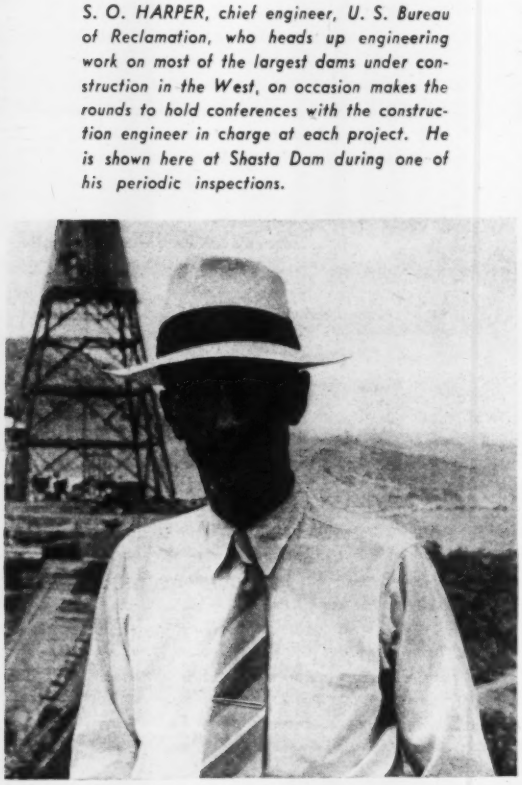
A complete portable light plant was installed at the scene of the explosion since the clearance of debris continued after darkness. Ten highway trucks, manned by 40 men, and a score of other trucks with their crews, joined the group from Madison County to aid in debris removal.

Wide World Photo

The man behind the face behind that mosquito netting is LIEUT. COL. ALBERT L. LANE, in charge of advance construction of the Fort St.John-Fort Nelson, British Columbia, sector of the Alaska Highway. Look at those long-nosed dive-bombers on the knee of his trousers, also on his helmet.

Playing an important part in the work of the Pittsburgh district, U. S. Engineers, is the group above. They are, left to right, GILBERT P. FLEETWOOD, resident engineer, and MAJ. W. C. SALE, assistant division head, construction division, Pittsburgh District; W. H. McALPINE, chief engineer, Office of Chief of Engineers, Washington, D. C.; and C. M. WELLONS, principal engineer, ALVA J. ARMSTRONG, civil engineer; and MILES BLISS, assistant resident engineer, all of the Pittsburgh district.

S. O. HARPER, chief engineer, U. S. Bureau of Reclamation, who heads up engineering work on most of the largest dams under construction in the West, on occasion makes the rounds to hold conferences with the construction engineer in charge at each project. He is shown here at Shasta Dam during one of his periodic inspections.



Seventy present and past members of the bureau of bridges of the Ohio Department of Highways got together recently for a "Butcher" party given as a farewell to four members of the bureau who have entered the army. Left to right are: First Lieutenant A. J. FRIEMOTH who has joined the U. S. Army Engineers at Lowry Field, Denver, Colo.; ROBERT S. HOLLAND, U. S. Army Engineers, with the railroad battalion at St. Paul, Minn.; W. S. HINDMAN, chief engineer of the bureau of bridges; GLENN R. LOGUE, assistant director of the Ohio Department of Highways; W. H. McBRIDE, U. S. Army Air Corps Cadet, and First Lieutenant SAM C. PRITCHARD, with the U. S. Army Engineers at Louisville, Ky.

The U. S. Maritime Commission is represented on construction of barges ... the East Coast by (left to right) J. M. BROWN, inspector; DOROTHY ...NN REID, secretary; and J. P. SARTZ, principal hull inspector. E. C. ...TIT (at right) is surveyor of concrete ships for the American Bureau ... Shipping.

RICHARD ELLIS (left), H. H. BROWN are, respectively, district manager and steel superintendent for The Austin Co. on a job where some 12,000 tons of steel is fast taking shape as an industrial plant. The backdrop is a 200-ft. suspended span in one of a group of 300-ft. roof trusses.

MEN AT WORK

EDUARDO MOLINA, civil engineer, is director general of waterworks and sewerage, Mexican Federal District. His office this year has underway $4,750,000 (American money) of water supply and sewage disposal construction. Replacement of existing structures and maintenance is expected to account for another $1,500,000 during 1942.

COL. J. A. O'CONNOR, U. S. Engineers, in charge of the southern or Fort St. John-Fort Nelson, British Columbia, sector of the new Alaska Highway has his headquarters at Fort St. John. In the radio car he is shown talking with Lieut. Col. Albert Lane, who is far up ahead in the wilderness at an advance construction camp. Radio communication is vital on this project, as there is no other means of communication.

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Approve Detroit express highway job

Construction of the proposed Detroit Industrial Defense Express highway, under provisions of the Defense Highway Act of 1941, has been authorized by the War Department, it was announced last week by G. Donald Kennedy, Michigan State Highway Commissioner.

To cost nearly $12,000,000, including right-of-way, the roadway will link two of the nation's largest war plants at River Rouge and Willow Run.

The highway will be the state's first large limited-access expressway.

In anticipation of action by the War Department, certification of the first section of the highway, as a regular federal aid project was obtained last February, and since then contracts and obligations totaling $3,200,000 has been made for construction.

The War Dept. certification provides 75 percent of the construction cost from special defense highway appropriations. Michigan will pay the remaining 25 percent of construction costs and will pay for right-of-way, estimated at $2,320,000.

Plans call for completion of the express highway by July 1, 1943.

Commissioner Kennedy explained that regular federal aid funds already obligated, would be reinstated for other essential war use, a good share of which will consist in recapping old concrete highways beginning to break up under terrific pounding they have sustained because of heavy war traffic.

The new highway calls for two divided lanes of 24-ft. concrete pavement, extending a total distance of 16.1 mile from Chase Road at Willow Run, past the River Rouge plant. There will be 16 road separations, two railroad separations, and one bridge.

Plans at present call for only seven entrances to the road.

Principal function of the road will be to assure an adequate outlet for the two plants, with their combined total of more than 200,000 war workers. In addition, the express highway is planned to join the proposed Detroit cross-town highway and eventually become part of the future Detroit-Chicago interregional highway.

Robert Moses, New York Park Commissioner, sent members of his staff to act as consultants in developing plans for the project. (*ENR*, April 9, p. 530).

Bureau of Reclamation marks 40th year

With little ceremony the Bureau of Reclamation last week celebrated its 40th anniversary.

Almost the only notice of the event came in an official report submitted to Secretary of the Interior Harold L. Ickes, by John C. Page, Commissioner.

Mr. Page's report stressed that four decades of engineering construction have readied the Bureau for its present vital role in the nation's war participation.

"With operations concentrated on maximum output, reclamation projects constructed during the past forty years are the mainstay of the economic strength now being exerted by the Western States," Mr. Page's report said. "Multi-purpose irrigation projects are providing the hydroelectric energy, the water and the manpower essential to Western agriculture, mining and manufacturing, today keyed to total war."

The report showed that about 1,000,000 farmers and townspeople reside on the 53 reclamation projects, in 17 Western States, and that 4,000,000 acres of irrigable land have been reclaimed or saved from abandonment.

"The food, forage, fiber and water produced by use of the irrigation projects in the West are essential war commodities," the report continued.

Alfalfa, meat and dairy products, sugar beets, truck and vegetables and other crops resulting from reclamation operations do not have the glamor of guns and tanks, but they are vital in waging a successful total war.

Power has been the most striking contribution to the war effort made by the Bureau, according to the report. From its first hydro plant, built for construction power on the Salt River Valley project in Arizona in 1906, this byproduct activity of the Bureau's irrigation activities has progressed to immense proportions in the economic stature of the west, culminating in construction of the largest power plants in the world. The Bureau has 28 plants in 11 states with an installed capacity of 1,365,462 kw. This installed capacity is said to equal the entire private and public installations in the 11 states the year before the outbreak of the first World War.

"By the close of this year, the Bureau will have increased its installed capacity to more than 1,770,000 kw., and by the end of 1945, this capacity will have increased to 3,207,000 kw.," Mr. Page said.

Other Bureau activities mentioned in the report included the relocation centers for west coast Japanese evacuees in Oregon, California, Idaho and Wyoming.

Engineer Corps plans sewage treatment courses

To overcome a shortage of skilled sewage treatment plant operators needed to run army plants, the Corps of Engineers, Service of Supply, has planned a school of short courses for men now engaged in the operation of such utilities.

The first of a series of these courses was held at the Georgia School of Technology, Atlanta, last week. Similar courses at the University of Texas and the University of Kansas, are planned. The repairs and utilities branch, Corps of Engineers, has arranged the courses which are expected to be conducted in each of the nine corps areas before the school is terminated.

Many authorities on public health and sanitary engineering serving in the various branches of the army will contribute their experience to the school. Assistance in presenting the courses is being obtained from colleges and universities and from state health organizations.

Explaining the need for the courses, the War Department said that at newly constructed posts, sewage plants have been built as simply as possible, but were often built in a short time in order to accommodate the initial influx of troops. In some cases, plants were placed in operation prior to completion. These plants must be operated for a continually changing population, requiring constant supervision and care, and close coordination between the schedule of troop activities and the plant operation must be maintained. As a result, the conditions at these installations present several problems not usually encountered at municipal sewage treatment plants.

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New York sewage group asks to hold staffs

Alarmed by approaching depletion of their staffs to a point where public health is menaced, members of the New York State Sewage Works Association in their annual spring meeting at Albany recently passed a resolution asking the Selective Service organization to aid in preventing such depletion.

Signed by Charles R. Velzy, president of the group, the resolution appealed to the Federation of Sewage Works Associations to make proper contact with the Selective Service organization and the U. S. Public Health Service to urge the safeguarding of public health by preventing the depletion of that personnel which is considered vital, essential and irreplaceable in municipal, national and institutional sewerage and sewage treatment systems.

Navy's engineers make first action report

The Navy's forces of sea-going engineers made their first report on their activities in the war, at Hawaii last week.

Although the exact extent of their work was of necessity a military secret, it was revealed that contingents of the Corps arrived at Honolulu shortly after the Japanese sneak attack of Dec. 7, and among other activities, took guns off the sunken battleship Arizona, setting them up as shore batteries or placing them on other ships; built and restored boilers, turbines, optical equipment, generators, transformers and guns of all sizes.

The organization developed a technique of building small furnaces, smelting down metal needed from parts found in scrap piles, and manufacturing its own tools. This procedure is said to have been so successful that it has become a routine matter for a regular crew of men.

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UCW declines as factor in construction field

The United Construction Workers, the CIO union established several years ago to organize the construction industry on a basis of industrial unionism, is still functioning but it now has only the most tenuous connection with the CIO.

Headed by A. D. Lewis, brother of John L. Lewis, the union has always been closely identified with the Lewis wing of the CIO. It merged last week with District 50 of the United Mine Workers, and is now functioning as a separate unit of District 50, continuing to carry the name of the United Construction Workers.

Immediately after the merger, James Carey, secretary of the CIO, announced that the union is considered by his organization as dissolved and that "the members will be afforded their opportunity to decide in a democratic manner for themselves their continued affiliation with the CIO."

Fate of the UCW will undoubtedly depend on the course of the relation between John L. Lewis' United Mine Workers and the CIO. Lewis is expected to pull out of the CIO at any moment.

What happens to the UCW is now largely a matter of academic interest to the construction industry.

In the face of determined opposition by federal agencies and the War Production Board, the union months ago gave up the effort to organize construction workers. It still has some locals in road work and prefabricated house building, but its chief organizing efforts are in fields that it considers to be related to construction — principally material suppliers and building service workers.

Massachussetts surveys war transport

Showing that automobiles are an essential and major means of transporting workmen to the Fore River shipbuilding plant at Quincy, Mass., the State Planning Commission has submitted the first of a series of exhaustive studies of transportation problems in relation to war industries, to Governor Leverett Saltonstall.

The survey ultimately will cover nearly 300 industrial plants, and is directed primarily toward the solution of the private automobile problem as a self-contained matter.

The entire transportation network of the state—railroads, street railways and bus lines—is being plotted on a large map on a scale of one mile to the inch. For purposes of the survey, it is assumed that one-half mile is a reasonable walking distance to a railroad station or bus stop. Therefore, each railroad station on the map is inclosed by a circle of ½-mile radius, and each car line or bus line is paralleled by a half-mile wide band on each side to show the area of its influence. When completed, this map will show all those areas requiring automobile transportation for at least part of the distance to work.

Questionnaires as to riding habits were received from approximately 57.7 percent of the 21,118 employees at the Fore River plant, and show that 16,633 workers reach the plant in 8,794 cars, or an average of only 1.9 persons per car. A study of round-trip car miles and man miles travelled showed that cars reasonably loaded would effect a daily reduction in car miles of 75,418, or a saving of about 5,000 gallons of gas per day.

The original survey was made on Feb. 23. Thereafter, on May 26, a recheck was made which showed an average loading of 2.7 per car.

Seventy-nine percent of the employees of the Fore River shipbuilding plant customarily go to work in private automobiles, 9.8 percent by bus, 3.6 percent by trolley and 7.5 percent walk. Nearly a third of the workers live a mile or more from any established means of transportation by which they could commute if automobiles become unusable.

Among recommendations, the board asked that state authorities give study to the matter of "fringe" parking at highway intersections, to permit workers living in isolated points to drive their cars only to such points, where they can double up with other workers on the trip to the plant.

TVA to pay $1,859,416 on power operation

The Tennessee Valley Authority will pay a total of $1,859,416 in lieu of taxes on its power operations for the fiscal year ending June 30, 1942, according to Gordon R. Clapp, general manager of the authority.

The TVA payments, representing an increase of $360,000 over those of the year before, will bring the total taxes and in-lieu payments on wholesale and retail power operations of TVA and its distributors to about $3,660,000. Municipal and cooperative distributors of TVA power will provide an estimated $1,800,000 in taxes and payments in lieu of taxes for the year.

Mr. Clapp's announcement was made on the basis of final computations of the amount and distribution of the authority's payments which will go to six states and 113 counties. Payments have been made monthly during the year on a preliminary basis, and the final payments, due to reach the payees by June 30, will adjust and complete the disbursements for the full fiscal year. Largest amounts will go to the state of Tennessee, which will receive $509,993; Alabama, $330,281, and Kentucky, $37,426.

Penn Turnpike shows increase despite rationing

Although rubber and gasoline rationing have reduced to a great extent the number of pleasure cars on the Pennsylvania Turnpike, trucks and buses are rapidly taking up the slack, according to a tabulation released by the Turnpike Commission last week.

Passenger car traffic dropped more than 30 percent during May from May, 1941, but truck travel increased 18 percent, and bus travel increased 10 percent. The commission estimated that 900 trucks used the Turnpike daily.

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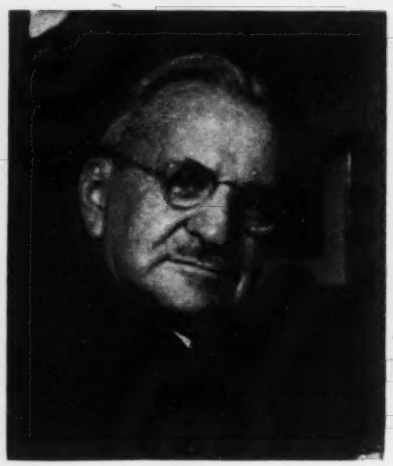
Award contract for redesigning Yadkin Dam

A contract to redesign and supervise construction of the $8,000,000 Yadkin Dam, near High Point, N. C. (*ENR*, June 11, p. 960 and previous), was awarded last week to W. R. Holway and associates, Tulsa, Okla., consulting engineers.

The contract was awarded on a cost-plus-fixed-fee basis, the firm to take the original plans of Murray and Flood, Inc., and redesign them to meet wartime needs and restrictions.



Honored by architects

Albert Kahn, Detroit architect and engineer was honored by the American Institute of Architects last week for his outstanding work in the field of industrial buildings and for significant contributions to the war effort.

The presentation of a commemorative medal was a feature of the annual convention dinner of the A.I.A. at Detroit June 24. Richmond H. Shreve, institute president, said the award is the first of its kind made since the institute was founded in 1857.

The medal has a base cut from a rolled steel section, with the seal of the institute embedded in bronze in the center of the steel piece. The inscription reads "Presented to Albert Kahn by the American Institute of Architects, 1942."

Mr. Kahn, with many automobile and other industrial plants to his credit has in the past several years designed many bomber and airplane plants, and aviation hangars, as well as naval base structures in the United States, the Pacific Islands and Alaska. Other highlights in his career of over 40 years include a large number of factories for the Soviet Union under that government's first "5-year plan.", eleven buildings at the University of Michigan and numerous office buildings, including the well-known Fisher Building in Detroit.

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Baltimore acts to obtain land for water supply dam

Within the next month, five special appraisers for the city of Baltimore, Md., will begin making valuations and obtaining options on land needed in construction of a new water supply dam on the Patapsco River.

The dam would be part of a proposed addition to the city's dwindling supply (*ENR*, June 11, p. 955 and previous).

F. Murray Benson, city solicitor, said last week that his office staff is now preparing abstracts of titles and descriptions of the properties needed, for use of appraisers.

Kentucky may take lands for roads through cities

The Kentucky State Highway Department will be empowered to start condemnation suits against property in Kentucky cities needed for improving primary roads after July 1, according to an opinion rendered last week by Assistant Attorney General Guy Herdman.

The opinion was given in answer to a query from the Warren County attorney. The attorney said that a resident of Bowling Green had complained that the Highway Department had no right to "take eight feet off my front yard."

Herdman said that the department does not have the authority to institute proceedings against city property at present, but a 1942 legislative act endows the department with that power after July 1.

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Contractors form labor pool to speed building

Eleven contractors engaged in war construction in the Spokane, Wash., area, have correlated their projects to form a labor pool that will make greatest use of available labor and equipment.

Peak labor periods on the 11 projects have been staggered so that workmen may be moved as needed from job to job without loss of time to the worker himself or lessening speed of the construction programs.

Henry Georg, Spokane contractor, said the program sets up a standard 48-hour week for the 12,000 workers involved—six eight-hour days, with the sixth day's work being paid for at time and a half. Extra shifts, rather than longer work weeks, will be added as needed in peak periods.

How to select and conserve wire rope

A limited number of reprints of an article "Wire Rope for Construction" appearing in *Engineering News-Record* for May 23, 1940 are available, giving information on the manufacture, proper selection and correct use of wire rope. This article was prepared after a 7,000 mile field trip, visits to wire rope manufacturing plants, and construction jobs, and discussions with many recognized authorities in the field.

The reprint will be mailed on receipt of 10c. to cover mailing and handling charges. Address requests to *Engineering News-Record, Editorial, 330 W. 42nd St., New York.*

Speeding the war effort:

America's war effort goes forward at an increasingly faster rate, through many agencies and in many fields. Here are some developments of the past week, of special interest to the enginer and constructor:

State highway departments—most of them seriously affected by the war's stringencies on road materials and supplies—continued to line themselves up behind the war effort last week. At Portland, Ore., the Oregon State Highway Commission pledged itself to spend funds only for the maintenance of present highways and construction of such roads as may be ordered by the government, in an order freezing all new highway construction until after the war. The North Carolina Highway and Public Works Commission announced it would use its limited supply of asphalt immediately, in order to free tank cars for other uses, proceeding with retreatment and repair work until the present supply of asphalt is exhausted. Frank Upman, Jr., acting Connecticut state highway commissioner, said he had established a working plan of car conservation estimated to save the state from $20,000 to $25,000 annually, by which automobiles formerly assigned to individual employees will be housed in a central garage at Hartford to make them available for pooling.

In its efforts to increase production of strategic and critical minerals, the Department of Commerce said that the Reconstruction Finance Corporation has adopted a new program under which loans, not to exceed $5,000 to any one borrower, will be made for the purpose of financing the unwatering, retimbering, making accessible or other preliminary development of mine workings. Conditions include the provision that such loans must be deemed to be advantageous to national defense by the governmental agency.

Old metal continued to pour into steel mills last week as many other cities and towns cleaned their municipal "backyard" to aid the war. Abandoned trolley tracks in Indiana have yielded a total of more than 2,500 tons of steel rails, with Evansville leading as the greatest contributor. Jacksonville, Fla., also shipped its first carload of old rails for war use. It was estimated that about 3,500 tons of rail are in the streets of the Florida city.

White cement floor successful light reflector

After several months' service the white cement floors installed in one of the windowless bomber assembly plants in the Southwest have proved their worth in affording better lighting conditions. The plant management has said it is satisfied with the floors, and a scientifically conducted lighting survey, in which more than 300 measurements were made, developed results that considerably exceed those obtained on standard gray cement floors. In this plant, where both types of floor are used, the reflection factor for the white cement floor was 61 percent the greater when the floors were new, and a recent check shows the white cement floor to have lost less reflecting value than the gray cement floor.

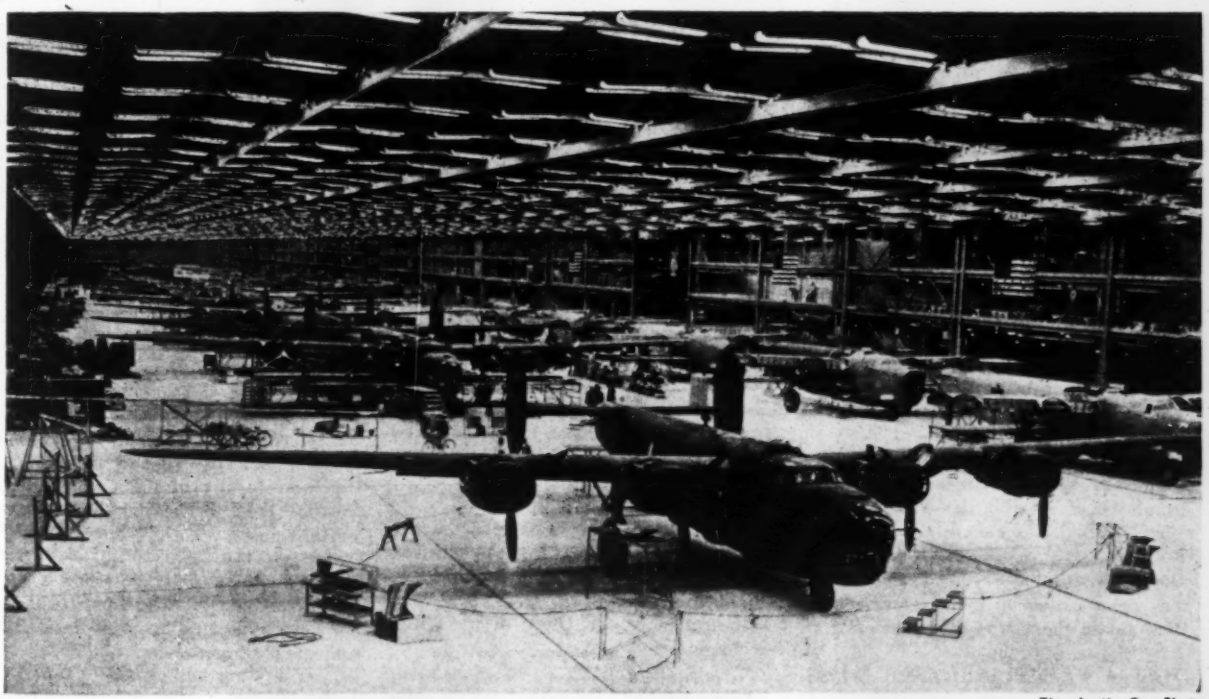
The plant is lighted with fluorescent tubes in reflectors mounted 40 ft. above the floor and 25 ft. apart, affording 36.5 ft. candles of illumination on the horizontal plane. What is held to be more significant, because it takes into consideration the reflecting value of the floor, is the measured vertical illumination, which in the four cardinal directions was 20.1, 18.3, 21.1 and 22.5 ft.-candles. These vertical illumination values were 21 percent greater than those obtained in gray cement floor areas. One interpretation of these figures is that 20 percent more lighting fixtures would have been required to achieve equal illumination in the gray cement floor area. From this fact proponents of white cement floors reason that the 5¢ per sq.ft. extra cost of the white cement floors can be absorbed in the savings from the fewer light fixtures required, while the future savings in electric current and lamp maintenance is all net gain.

Universal Atlas Cement Co. Photo

Taking one of the 300 illumination readings in a survey made at the time the white cement floors were new. When in use, the white floors lost less reflecting value than gray floors.

Inasmuch as the plant managers claim that the floors are as dirty as they will ever get, the actual figures are of interest: When new, the white cement floor reflected 44 percent of the 36.5 ft. candles falling upon it, or 16 ft.-candles. After six months' use, an 18 percent loss in foot-candles is noted, bringing the reflected light down to 13 ft.-candles. For the gray cement floor the initial reflection was 27.4 percent of 36.5 ft.-candles, or 10 ft.-candles. After six months' service a loss of 22 percent was noted, bringing the reflected light down to about 8 ft.-candles, or half as much as for the white cement floor. According to the plant manager, the standard method of maintenance is to sweep the floors daily, damp mop them once a month and scrub them with a rotary brush machine every two or three months.

Since 1941 a dozen aircraft plants, involving over 6,000,000 sq.ft. of flor space, are said to have been built with white cement floors. How the floors were built was told in *ENR* March 12, 1942, p. 398.



The Austin Co. Photo

A principal reason for selecting white cement floors for this assembly plant for Consolidated B-24 bombers was to get reflected light into the dark areas under the wings and fuselages, as an aid to the workmen.

MEN AND JOBS

E. L. Cousins, general manager of Toronto Harbor for the Toronto Harbor Commissioners, has been appointed administrator of the Port of Halifax.

L. B. Grace, of St. Peter, Minn., county engineer for Nicollet county, has been granted a leave of absence to take employment on a government project in South Dakota. George Anderson will be acting county engineer.

Lt. P. O. Peterson, Jr., has been named acting area engineer for the construction of an army air base project in Iowa. He succeeds **Maj. E. E. Taylor,** who has been transferred to another project.

W. Vance Baise, chief highway engineer for the state of North Carolina, recently was appointed North Carolina state administrator of the War Transportation Conservation Program.

Herbert M. McLaird, of Albert Lea, Minn., who has been an engineer with the state highway department since 1926, has been hired as county engineer for Fairbault county with headquarters at Blue Earth.

Walter Ullen, assistant county engineer for Renville county, Minn., with headquarters at Olivia, has been named county engineer to succeed **E. L. Chamberlain,** who has been employed on a defense project in Wyoming.

Lt. L. F. Otto, of Plattsmouth, Neb., acting area engineer in the Army's Missouri Valley improvement work, has been promoted to the rank of Captain and stationed at Fort Crook, Neb.

S. R. Quealy, contractor at Fort Dodge, Iowa, will leave shortly for Alaska to become a construction engineer-supervisor on the Alaskan highway project.

H. M. Sparks, district highway engineer at Mitchell, S. D., has been commissioned a Major in the Corps of Engineers and will be assigned temporarily at Omaha, Neb.

James J. Versluis, for many years an employee of the Chicago city engineer's office, retired last week.

Joe R. Hendrickson, of Alexandria, Va., has been called to active service as a Captain in the Corps of Engineers.

William W. Hood of Davidson College, N. C., is acting as visiting professor of engineering at the summer school of Duke University, at Durham.

Col. Donald J. Leehey, U. S. district engineer at Portland, Ore., has announced several changes in the commissioned personnel of his office. Changes included: **Lt. Col. Homer W. Bunker,** assigned to duty as chief of the procurement control section, at Portland; **Maj. John Herbert Brown,** assigned as executive assistant, at Portland; **Maj. C. C. Phillips,** area engineer, Walla Walla, Wash.; **Capt. Roy W. Schuefele,** chief of administrative division, Portland; **Capt. Otto H. Schrader,** assigned to area engineer, Klamath Falls; **Capt. Robert M. Stewart,** resident engineer, Pendleton Air Base, Pendleton, Ore.; **Capt. C. C. Davis,** resident engineer, Pocatello, Idaho; **Capt. Frank C. Ransom,** executive assistant, Portland; **Capt. Merle E. Wilson,** reassigned to the procurement division; **Capt. Joseph C. Herros,** reassigned as assistant to the area engineer, Corvallis; **Lt. Samuel C. Guess,** assistant to area engineer, Burns, Ore.; **Lt. Harold G. Brown,** chief of the special service division, Portland; **Lt. Byron L. Price,** administrative division, Portland; and **2nd Lt. Clayton C. Morse,** assigned to the procurement control section at Portland.

Alton Worsley, chief engineer of the municipal water, light and sewer departments at Rocky Mount, N. C., has been named city engineer in addition to his other duties.

Herbert I. Collins, a senior engineer with the United States district engineer's office at Mobile, Ala., has joined the Corps of Engineers with the rank of Lieut. Colonel.

Fred G. Mylius, formerly representative of the Lehigh Portland Cement Co., at Columbia, S. C., has been commissioned a Lieutenant in the Corps of Engineers.

Maj. Ellery W. Niles has been named U. S. Army district engineer at Omaha, Nebraska.

Peter P. Goerz, U. S. district engineer at Seattle, Wash., has been promoted from Lt. Col. to Colonel. **Lts. A. K. Reed** and **Lewis C. Crouch** were advanced to the grade of Captain.

Clarence D. Sasscer, a member of the power section of the Denison district, U. S. Engineers, has been called to Washington to serve with the Rivers and Harbors section of the Office of the Chief of Engineers.

William Robert Hart, Raleigh, N. C., road contractor, is supervising the leveling of seven buildings and the grading work for the widening work for U. S. Highway 64 through Raleigh.

Leonard A. Wagner, formerly superintendent of construction for the Consolidated Engineering Co. and until recently on construction of the Naval Air Station at San Juan, P. R., has been called to active duty as a First Lieutenant in the Corps of Engineers.

Frank K. Quimby, for the past 12 years construction engineer for the Racine, Wis., water department recently entered the service of the War Department as sanitary engineer at Chicago in charge of maintenance and repair of water works, sewerage and services in the Sixth Corps area. **E. Miles Griffith,** assistant engineer for the past 11 years has been made distribution engineer assuming the duties previously performed by Mr. Quimby.

Rolf Eliassen, assistant professor of sanitary engineering at New York University, has received a Captain's commission in the Corps of Engineers. He has been assigned to the North Atlantic division office in New York City, to serve as assistant division utilities officer in charge of water, sewage and refuse disposal operations.

Leroy L. Hidinger of the Morgan Engineering Co. of Memphis, Tenn., was awarded the Marston medal for distinguished service in engineering at the June commencement at Iowa State College, Ames, Ia.

Thomas H. Cutler, state highway engineer, was appointed a member of the Kentucky state professional engineers registration board recently.

Rear Admiral Ben Moreell, chief of the Bureau of Yards and Docks, and chief of the civil engineers, U.S.N., has been granted the degree of doctor of engineering by Washington University, St. Louis, Mo.

J. D. Pride, of Halifax, N. S., recently joined the engineering staff of the Nova Scotia Light & Power Co.

Maj. Hamilton C. Eastman has been transferred from the engineering school at Fort Belvoir, Va., to duty on the staff and faculty of the Command and General Staff School at Fort Leavenworth, Kans.

Henry J. Masson, for 25 years a member of the staff of New York University, has been appointed assistant dean of the College of Engineering.

J. E. Woodard, city building inspector at Wilson, N. C., has resigned to accept a post in national defense work.

BRIEF NEWS

DESPITE cuts in tourist traffic, Western Kentucky's five toll bridges showed a gain of 2.7 per cent in revenue for May, 1942, over the same month in 1941. Highway department officials said that total traffic had decreased by 3.3 per cent, but the revenue increase was caused by increased use of bridges by trucks.

THE Louisiana State Highway Department has applied for approval of plans for reconstruction of a pontoon highway bridge across the Intracoastal Waterway, at a point where the waterway is crossed by State Highway 247.

THE Swedish Riksdag at Stockholm recently voted 50 million kroner (about $12,500,000) to be used by the Ministry of Social Welfare to aid in construction of small homes.

TEN new areas added to the defense housing critical area list by the War Production Board last week were: Rosiclaire, Ill.; Decatur, Ind.; Richmond, Ind.; Louisiana Ordnance Works, Doyline, La.; Sault Ste Marie, Mich.; Tonopah, Nev.; New Castle, Pa.; McGregor, Tex.; Elkton, Va.; New Martinsville, W. Va.

SOME £800,000,000 (about $3,200,000,000) annually will be spent on new houses in the ten years after the end of the war, it was estimated at an annual meeting of the British Building Industries National Council. The Council estimated that about 250,000 to 300,000 workers will be required for post-war reconstruction and development on the engineering side; and 1,500,000 to 1,750,000 on the construction side.

PLANS for a proposed $1,000,000 toll-free bridge at Sioux City, Iowa, have been completed by Sverdrup & Parcel, consulting engineers, St. Louis, Mo. The proposed bridge would be part of the proposed strategic network highway 77.

BURWELL BANTZ, Washington state highway director, has been authorized by the Washington Toll Bridge Authority to dispose of the steel remaining in the main towers and cables of the collapsed Tacoma Narrows bridge. Weight of each tower is listed at 1,927 tons and that of the suspension cables at 3,817 tons.

THE Department of Roads of the Province of Quebec has reduced its appropriation for new road construction from $14,000,000 in 1941 to $7,000,000 for this year.

THE Mexican government has approved an investment of $575,000 for irrigation and allied water works around Lake Chapala, State of Jalisco. The work, to be started within two months, is expected to benefit Ocotlan and Magdalena, key towns on the lake.

OFFICIALS of the Pennsylvania Department of Highways last week expressed worry over obtaining crews for snow removal and cindering next winter. The department said it was unable to retain these men on the payroll during the summer since maintenance work has been curtailed because of material shortages.

INVENTORY of highway bridges on all rural roads and urban extensions in Minnesota completed recently by the Highway Planning Survey, lists 8,605 structures of more than 20-ft. span. There were 1,420 bridges on state trunk highways, 1,497 on state aid roads, 1,573 on county aid roads and 4,115 on township and other local roads. Of the total, 6,015 were reported in "good" condition.

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Canadian engineers get army promotions

Five Canadian engineers now on active service with the Canadian Army, recently have been advanced in rank or in administrative position.

Maj. Gen. H. F. G. Letson, formerly head of an engineering firm in Vancouver, B. C., has been appointed Adjutant General in the department of national defense, at Ottawa. Maj. Gen. J. P. Mackenzie, formerly an engineer for the Western Bridge Company of Vancouver, has been made Quartermaster General.

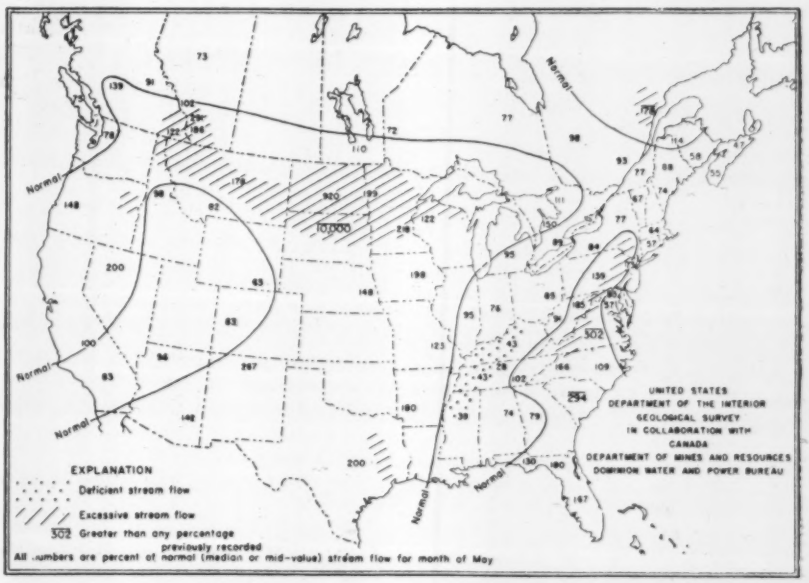
Lieut. Col. H. A. P. Francis, formerly assistant adjutant and quartermaster general of a Canadian armored division becomes a director in the branch of the Adjutant General's office, with the rank of Colonel. He is succeeded in the field by Lieut. Col. J. F. A. Lister, formerly chief instructor at the Royal Military College, Kingston, Ontario. Col. R. Eric Smythe, commandant of the Hamilton-Niagara area, becomes a director in the branch of the Adjutant General's office.

First joint American-Canadian stream flow report notes favorable conditions

The first joint American-Canadian stream flow report (*ENR*, June 18, p. 966), issued last week, reported the partial alleviation of drought conditions in eastern and southeastern United States; notable floods in an area embracing interior British Columbia, southwestern Alberta, eastern Oregon, and a great deal of the Intermountain West, as well as in a narrow area from the Delaware River Basin and southeastern New York southwestward to western North Carolina; much more water in storage available for power and irrigation this year in general throughout the United States and in Quebec.

The outlook was said to continue favorable for normal or above normal stream flow throughout much of Canada and the western United States. In parts of Kentucky, western Tennessee, Alabama, Mississippi and in a narrow coastal fringe extending from New Jersey through Virginia, abundant rains are still necessary to assure normal stream flow.

With the exception of reservoirs for municipal water supply in New Jersey, the amount of water storage available for power and irrigation on May 31 was considerably greater in eastern Canada and the United States than on May 31, 1941.


Normal
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
IN COLLABORATION WITH
CANADA
DEPARTMENT OF MINES AND RESOURCES
DOMINION WATER AND POWER BUREAU
EXPLANATION
Deficient stream flow
Excessive stream flow
502 Greater than any percentage previously recorded
All numbers are percent of normal (median or mid-value) stream flow for month of May

New floods occur in East and Midwest

Rains of unprecedented severity, dumping tons of water on river watersheds within a relatively short space of time, brought new floods last week to areas of the Northeastern and central Midwestern areas of the United States.

Heavy rainfall covering the Missouri valley from Sioux City, Iowa, to Kansas City, Mo., and far into Kansas along the Kaw River watershed, caused engineers along the stream to watch the river apprehensively last week.

Omaha, Neb., registered 3.48 in. of rain in 24 hours, and heavy downpours were reported at Sioux City, Grand Island, Beatrice and numerous other Nebraska and Iowa towns close to the Missouri River. Rains of over 1-in. fell over most of the eastern Kaw watershed.

The already swollen Kaw had left its banks at Stanberry, Mo., flooding the town and drowning hundreds of head of livestock, putting farm lands under water and flooding several sections of U. S. Highways 40 and 77.

Heaviest overflow was expected in the watersheds of the Big Stranger and Delaware Rivers, in the Winwood and Perry, Kan., region.

At Keats, northwest of Manhattan, Kan., a washout on the Rock Island's Kansas City-Denver route necessitated transfer of 60 passengers to trains headed in opposite directions. On the Union Pacific line at Belvue, east of Manhattan, a washout forced detouring of trains to Rock Island tracks between Manhattan and Topeka.

Northern New England

Rains averaging more than two inches in less than 24 hours last week brought disastrous floods to sections of northern New England states, swelling rivers and their tributaries to flood stages.

Weather bureau reports showed rainfall in a 24-hr. period at Concord, N. H., about two and one-half inches; 3.60 inches at Burlington, Vt., in a few hours, and precipitation at St. Johnsbury, Vt., was said to have been heaviest since 1927. A score of homes in St. Johnsbury were inundated, and washouts at several points along the Canadian-Pacific RR right-of-way between Barton and Newport caused suspension of rail traffic for nearly a full day.

At Newbury, Vt., the Connecticut River rose 13 ft. in 16 hrs., and washed out gasoline tanks and buildings along the river front.

In New Hampshire, the town of Warren was all but isolated, with only one telephone line in service, a bridge over the Baker river washed away and highways and approaches to the town washed out or flooded.

Severe damage was reported to the Boston and Maine RR right-of-way in Warren.

In Maine, many rivers rose to above flood stages after heavy rains—reported as much as six inches in some places.

Pennsylvania relief plans

A $1,250,000 joint flood relief and flood control program for the areas in Wayne, Lackawanna and Luzerne counties that were hard hit in recent flash floods (*ENR* June 18, p. 970 and previous) has been authorized by Governor Arthur H. James of Pennsylvania.

The floods took many lives, damaged 66 highway bridges, and did extensive damage to railroad and business property, as well as roads and farmlands.

Part of the expenditure already is being made by the Highway Department, which is planning to make temporary bridge replacements to eliminate need for using critical materials. Actual flood control work will be done by contract, and is expected to be under way within five weeks.

In the meantime, the State Department of Forests and Waters has been authorized to expend $25,000 for stream clearance, supplementing similar work being carried out by the WPA.

A four-man committee appointed by the governor to determine extent of damage and make recommendations for repairs blamed the floods—in large part on encroachment by municipal and private buildings, and on the filling of the stream-beds by mine waste to a point where any slight rise forces the streams to seek other courses.

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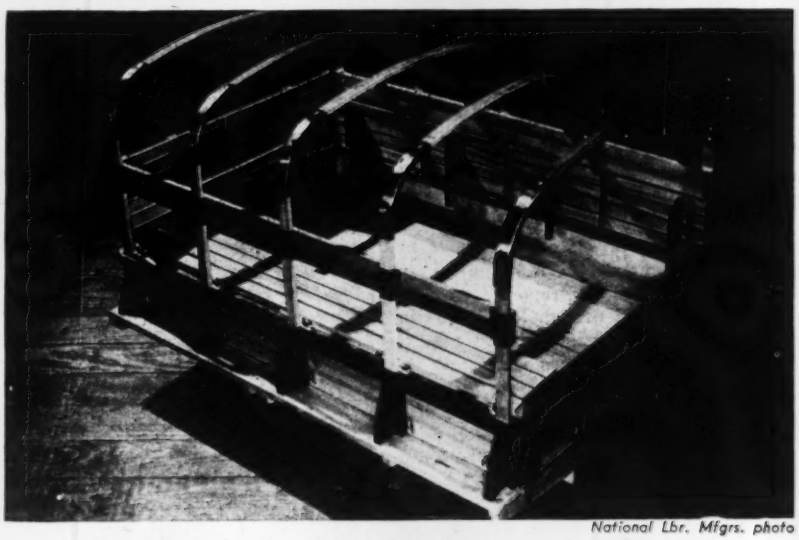
Town's water cut off

Although rain has been plentiful during the past week, there hasn't been any water available from the town water system of Jefferson, N. C.

The utility is owned by W. E. McNeill, who recently failed to reach an agreement with the town government for sale of the system. Mr. McNeill cut off the water supply. Local residents have resorted to wells and to catching buckets of rain water.

While Mayor Ira T. Johnston said he did not know when the controversy would be settled, Cone Scott, a local business man, began to rush construction of another system to be completed within the next month.



National Lbr. Mfgrs. photo

Army cargo truck bodies to be made of wood

Manufacturers report that the army has decided to change from steel to wood bodies for all cargo trucks, and intends to have a production schedule of 1,000 bodies or more per day in progress by July 1.

Five types of cargo truck bodies, heretofore constructed of steel, are affected. Eighty percent are the 80x144-in. size. The balance is made up of the 80x108 and 70x108 in. sizes and the six-ton, 6x6-ft. and four-ton, 6x6-ft. sizes. About twelve prime contractors were required to submit subcontracts to the Quartermaster General by July 6.

National Lumber Manufacturers Association representatives reported that a survey indicated that there would be sufficient lumber for the proposed program—approximately 350,000,000 ft. of hardwood per year.

To use available stocks of 1-in. thick lumber the truck bodies will be made of glued laminated pieces for most of the parts that are over 2 in. thick. The amount of material available for floor planks can be increased by permitting pieces shorter than 12 ft. Joints can be staggered and unions made by the half lapping method.

Timber trusses of 77.5-ft. span sold, readymade, to shipyard

TIMBER TRUSSES, built to prescribed span and load specifications, were built to order in a Portland mill whence they were delivered to the job, on a trailer, ready to be lifted into place in the new assembly shop of the Oregon Shipbuilding Corp. at St. Johns. The order included a large number of the trusses which were set 20 ft. apart in the 11 bays of the vast shop. The shop has a steel frame up to the level of the overhead crane rail and a roof structure entirely of wood. Crane rails and their steel supports project beyond the roofed area so that the cranes can pick up materials stored outside the building.

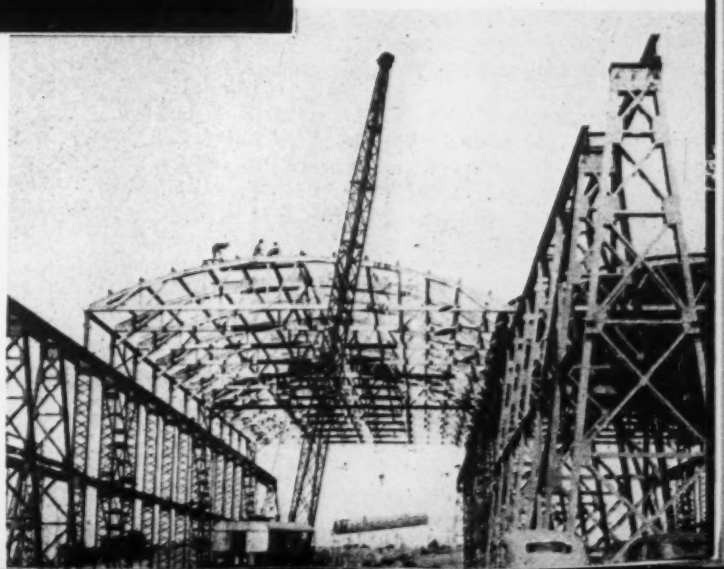
As has now become almost standard practice in timber construction, these trusses are assembled with metal shear connectors. Top and bottom chords consist of two timbers between which the web members are inserted. A cap timber gives lateral support to the pieces of the top chord and also affords a smooth surface to which the clip angles that hold the purlins can be attached. The ends of the trusses are reinforced with short timbers to provide added bearing area on top of the columns. This column-truss connection is also supplemented by a timber knee brace, which comes to the job folded back against the bottom chord so as not to be broken off in transit.

Roof trusses coming to the job ready to go up made for speedy erection. Two cranes were used to set the trusses.

A trailer load of five 77.5-ft. trusses does exceed allowable tire loads.

At left: From stock pile (right) the cr "hands up" a truss to the carpenter recept committee at roof level.

Steel columns support overhead crane r which extend beyond roofed area. Only roof structure is of timber.



OBITUARY

Charles A. Ewing, 87, a civil engineer for the Wisconsin Public Service Corp. for the past 33 years, died June 16 at Milwaukee. Mr. Ewing had worked in South and Central America and in the southern United States as an engineer for various railroad companies, and was a construction engineer for the St. Louis World's Fair of 1904 before joining the Wisconsin Public Service Corporation.

Donald A. Jackson, road engineer for the counties of Gloucester and Northumberland, New Brunswick, Canada, died at Chatham, N. B., June 13.

Albert E. Cumming, 88, civil engineer of Helena, Mont., died recently.

J. Kenneth Swinford, prominent Houston, Tex., engineer, and civic leader, died there recently.

C. Hugh Elers, 58, of Stoneham, Mass., a construction engineer for the Socony-Vacuum Oil Co. of Boston, died June 16.

Erich August Mees, 59, principal engineer of the Federal Power Commission, died at Columbus, Ohio, June 12. A native of Columbus, Mees became associated with his brother, Curtis A. Mees, now of Atlanta, Ga., at Charlotte, N. C., leaving that association in 1912 to join the engineering firm of Tucker & Laxton, Inc., at Charlotte. In 1917, he rejoined his brother, continuing the association until he became director of the water resources division of the National Power Survey in 1934. He became principal engineer in 1939.

Howard J. Manning, 53, chief engineer of the Ohio Inspection Bureau, died recently at Columbus.

Charles E. Bowron, 71, engineer of Birmingham, Ala., died there June 17. He had maintained an office in that city as a consulting engineer for the past 15 years.

T. Semmes Walmsley, 53, former mayor of New Orleans and a major on the Air Corps Reserve engineering staff, died June 17 at San Antonio, Tex. He had been administrative assistant in charge of construction and supply at Randolph Field.

W. A. Gee, of Big Lake, Tenn., chief engineer of several districts for the Humble Oil Co. since 1919, died recently.

James Towart, a constructing engineer who had been in consulting practice since 1907, died June 18 at Montour Falls, N. Y. He was 70.

Henry Wise, 92, contractor of Winter Haven, Fla., until his retirement a few years ago, died June 23.

Stephen Birch, 81, Fargo, N. D., president and foundeer of S. Birch & Sons, construction company, died June 14 at Great Falls, Mont.

George Wilbur van Vliet, pioneer Winnipeg, Man., building contractor, died June 16. He was 79.

Edward Gaskill Flanagan, 66, North Carolina state highway commissioner, of Greenville, died June 17.

Oil shortage forces hot water rationing

Current shortages of fuel oil on th Atlantic Seaboard last week forced th rationing of hot water service in a New York City public housing project

A trial schedule permits use of ho water during three hours in the mornin and three hours in the evening. For merly, hot water was supplied continu ously from 6 a.m. until midnight.

Meanwhile, the New York City Hous ing Authority said it was studying con version of its fuel oil burning equipmen to coal burning equipment. Normally more than 11,000,000 gal. of fuel oil are consumed annually in the 12 projects completed and occupied.

CONTRACTS AND CAPITAL

ENGINEERING CONSTRUCTION volume for the week totals $158,839,000, an increase of 11 percent over the corresponding week last year, and 2 percent above the total for the preceding week.

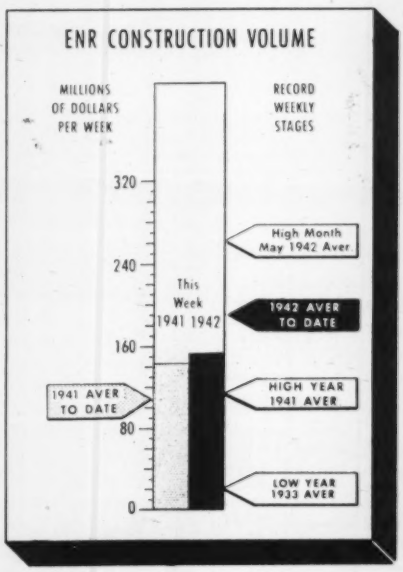
Public construction gains 18 percent over the week last year, and 5 percent over last week, and is responsible for the current week's increase, as private work is 52 percent under a year ago, and 31 percent below a week ago.

The week's construction brings 1942 volume to $4,905,294,000 for the 26-week period, an increase of 73 percent over the corresponding weeks in 1941. Private work, $341,408,000, is 53½ percent below last year, but public construction, $4,563,886,000, is 117 percent higher as a result of the 196 percent gain in federal work.

In the classified construction groups, gains over the 1941 week are in public buildings, earthwork and drainage, and unclassified construction. Increases over last week are in sewerage, bridges, commercial building and large-scale private housing, earthwork and drainage, and unclassified construction.

New capital for construction purposes for the week totals $13,949,000. This is 36 percent below the volume for the corresponding week last year. The week's new financing is made up of $13,000,000 in corporate security issues, and $949,000 in state and municipal bond sales.

New construction financing for the year to date, $6,886,294,000, is 106 percent higher than the $3,350,549,000 reported for the 26-week period in 1941.



CONTRACTS

(Thousands of dollars)

	Week Ending June 26 1941	June 18 1942	June 25 1942
Federal	$95,318	$136,232	$139,437
State & Municipal	32,130	8,231	11,682
Total public	$127,448	$144,463	$151,119
Total private	16,072	11,207	7,720
TOTALS	$143,520	$155,670	$158,839
Cumulative 1942 (26 weeks)			$4,905,294
1941 (26 weeks)			$2,841,403

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1941 26 weeks	1942 26 weeks
NON-FEDERAL	$459,207	$347,339
Corp. Securities	138,202	149,459
State & Mun.	254,232	150,461
U.S.H.A. loans	30,399	.....
R.E.A. loans	500	.....
R.F.C. loans	35,874	47,419
FEDERAL	$2,891,337	$6,538,955
TOTAL CAPITAL	$3,350,544	$6,886,294

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost	June '42	274.19	131.80
Building Cost	June '42	221.18	119.56
Volume	May '42	821	360

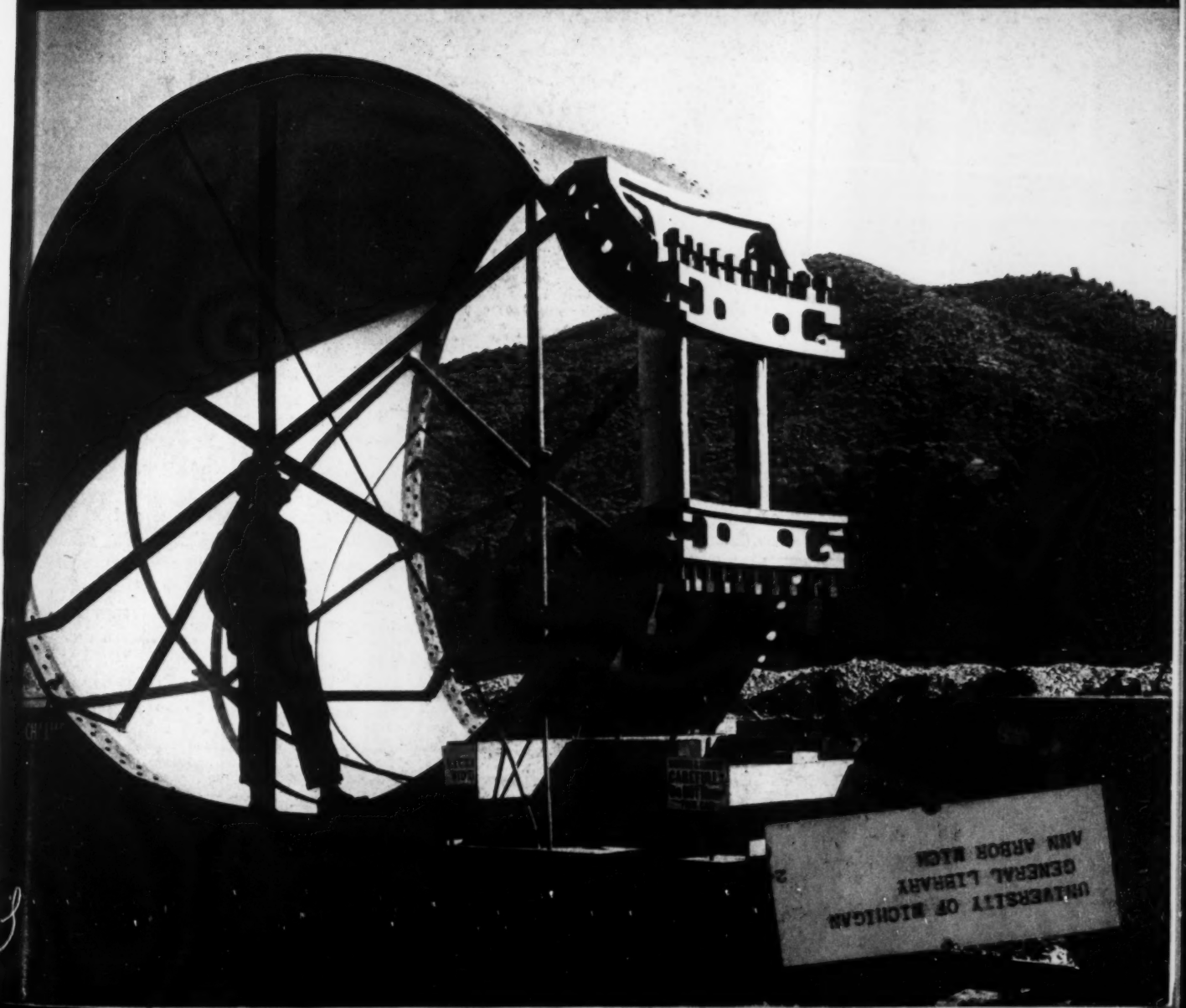
FHA MORTGAGES

	Week Ending June 21 1941	June 13 1942	June 20 1942
Selected for appraisal			
Title II	$33,797	$8,008	$7,190*
Title VI	$ 5,725	$12,131	$12,297*

* Subject to revision.

ENGINEERING NEWS-RECORD

Section of 15-ft. dia. scroll case moves toward Shasta Dam as power plant nears completion.



4 SIMPLE STEPS to Save

*Months of Time and *Tons of Vital Materials

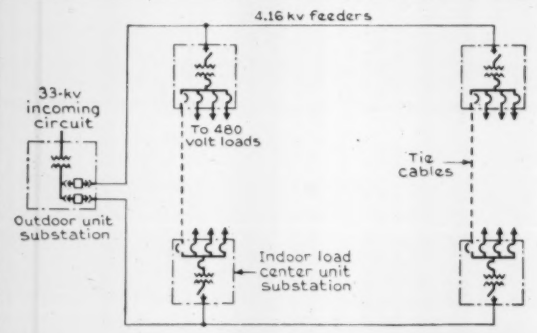
—In Getting Electric Power to New Production Mach

1. Decide on a modern load-center distribution system using load-center unit substations.

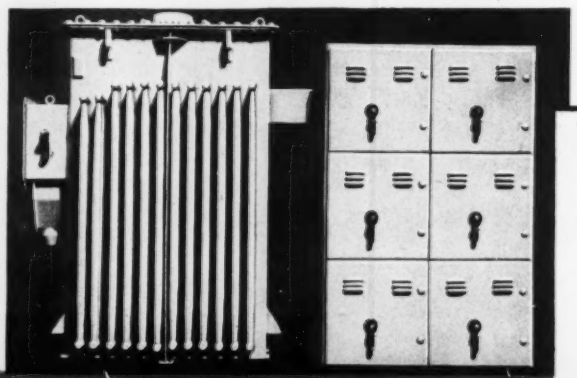
2. Make a simple, one-line electrical layout of your proposed plant.

3. Specify standard equipment; standardization means you get better, equipment more quickly and at lower cost.

4. Order your electric equipment as soon as possible so that it will be available for immediate installation when construction has progressed far enough.



A typical one-line diagram of a load-center distribution system, with power being distributed at high voltage (2.4 to 13.2 kv) to unit substations located near the centers of electrical load areas—eliminating long, heavy, low-voltage feeders from a distant large substation. Thus, you save tons of copper, and the performance of motors, lamps, etc., is improved because of the reduction in voltage drop.



Factory-assembled, safety-metal-enclosed unit substations are quickly and easily installed right at load centers—without expensive vault construction, thanks to Pyranol. Simply slide the completely assembled sections into position and connect to the primary and secondary cables.

BY following these steps in General Electric's plan to provide standard load-center distribution equipment in the shortest time possible, you can save from *one to six months* of the time ordinarily required. You eliminate hours and hours at the drawing board, and long, drawn-out correspondence.

What's more, load-center distribution saves tons of steel, copper, and other vital materials; installation time is quicker, and service better.

To help you get your equipment specified, purchased, and installed under this new, short-time plan, a new "handy guide" is just coming off the press. Mail the coupon for your copy today.

General Electric, Schenectady, N. Y.

General Electric and its employees are proud of the Navy award of Excellence made to its Erie Works for the manufacture of naval ordnance.

GENERAL ELECTRIC

General Electric Co., Sec. A 302-10
Schenectady, N. Y.

I understand your new handy guide to "Quickly Installed Electric Power Systems" (GED-1006) explains in detail the steps to follow in order to get power to new production machinery in one to six months less time. Please send me a copy

Name.....

Company.....

Address.....

City..... **State**.....

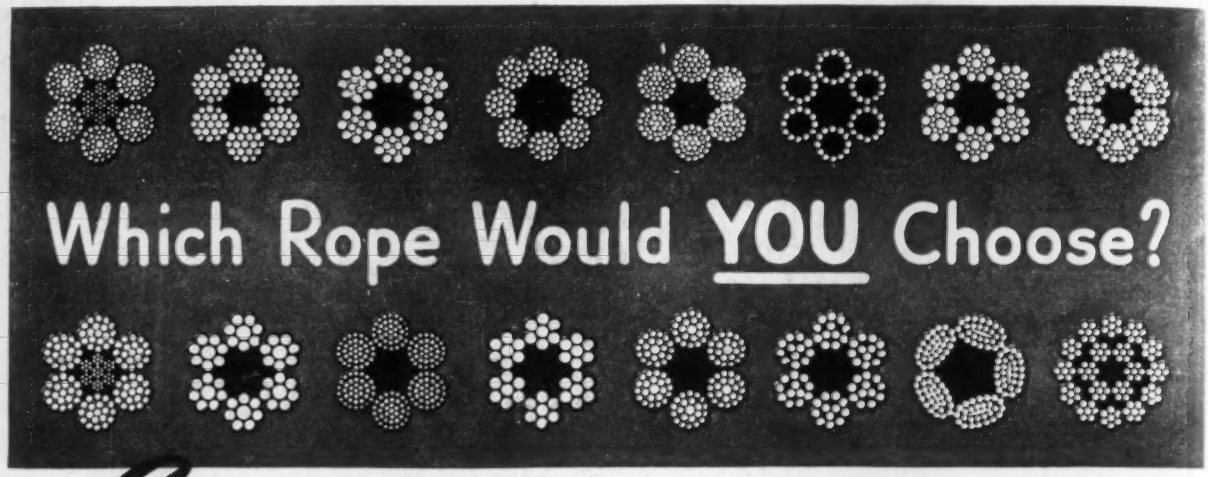
302-10-1710

Throughout the land Raymond men and Raymond equipment are at work bolstering the giant superstructure of war. Important naval and military bases! Production projects! Raymond piles are in the field on every front, at every turn of the road that leads to victory. ● And when the war has been won, Raymond will marshal all its forces on the civilian field. Building for the future, laying the foundations for a better world in which to live and work—that will be Raymond's all-out Peace effort.

THE SCOPE OF RAYMOND'S ACTIVITIES includes every recognized type of pile foundation, concrete, composite, precast, steel pipe and wood piles. Also caissons and construction involving shore protection, ship building facilities, bridges, tunnels, dams, harbor and river improvements, housing and highways

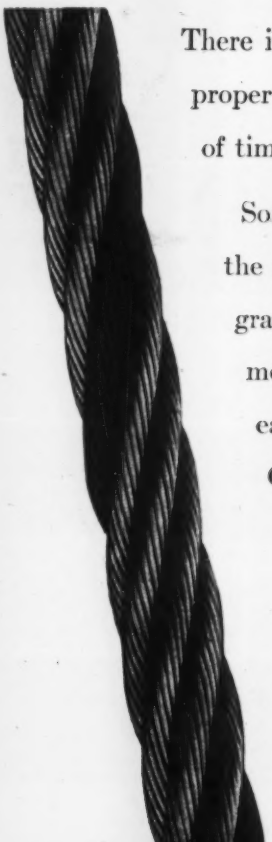
RAYMOND CONCRETE PILE COMPANY

140 CEDAR STREET • NEW YORK, N. Y. *Branch Offices in Principal Cities*



Economy DEPENDS ON THE RIGHT CHOICE

(Reading Time: 30 seconds)



There is a wire rope for every application. Make sure you are using the proper rope on each installation. The wrong rope can be extremely wasteful of time, money and steel.

Some machines have sheaves which impose severe bending strains on the rope. On some machines the cable drags through abrasive stone, gravel or rock. Some ropes must endure the heat of handling ladles of molten metal, while others must run at excessively high speeds. For each job there is a one best rope, not only in construction but grade. Consult an American Cable engineer.

Ask him also about American Cable **TRU-LAY PREFORMED** wire rope. **TRU-LAY** has set new and higher standards for wire rope service. Conserve steel, time and money by using the proper construction and grade of **American Cable TRU-LAY Preformed.**

AMERICAN CABLE DIVISION
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ESSENTIAL PRODUCTS . . . AMERICAN CABLE Wire Rope, TRU-STOP Emergency Brakes, TRU-LAY Control Cables, AMERICAN Chain, WEED Tire Chains, ACCO Malleable Iron Castings, CAMPBELL Cutting Machines, FORD Hoists and Trolleys, HAZARD Wire Rope, Yacht Rigging, Aircraft Control Cables, MANLEY Auto Service Equipment, OWEN Springs, PAGE Fence, Shaped Wire, Welding Wire, READING-PRATT & CADY Valves, READING Electric Steel Castings, WRIGHT Hoists, Cranes, Presses . . . *In Business for Your Safety*

CONSTRUCTION REPORTS

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York
ELSIE EAVES, Manager *SCOTT McLEOD, Statistician*
(Daily service also available—Write for details)

Location of ENR Correspondents

Symbols and Abbreviations Include

† Federal Government
★ Project of $500,000 or over
ENR Engineering News-Record
CD Engineering News-Record Construction Daily
A-E-M Architect — Engineer-Management type of contract.

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

Classes of Construction

(Named in order of Listing)

Water Supply — Unclassified
Sewers, Waste Disposal — Latin America
Bridges, Grade Crossings — Public Buildings
Streets & Roads — Commercial Buildings
Earthwork, Waterways — Industrial Buildings

Stages Reported

PROPOSED: (except Streets & Roads):

BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR);

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Note: To comply with censorship requirements, addresses on some reports are being generalized. Data which would reveal the purpose of the improvements and the size are withheld. The name of contractor and general area are reported.

WATER SUPPLY

PROPOSED WORK

Ia., Corning—V. J. Mack, city clk., reservoir for water supply. $48,000.

Mass., Attleboro — Water Dpt., City Hall, 13,000 ft. transite water pipe line. $15,000.

Mo., Blue Springs—Bids soon, WW imprvs. $76,000. Black & Veatch, 4706 Bway., Kansas City, Mo., engrs. CD 4/7—ENR 4/9.

N. C., Goldsboro—A. B. Sansbury, city mgr., surveys imprv. water and sewer facilities. Over $25,000. W. C. Olsen, 5 Exchange Pl., Raleigh, consult. engr.

Pa., Greenville—Greenville Municipal Auth., C. P. Masters, in charge, c/o Greenville Water Co., Hadley Rd., bids soon, WW imprvts., 1 story, 32x32 ft., brick, concrete bldg., mixing chamber, pipelines, basin. $60,000. Morris Knowles, Inc. 1312 Park Bldg., Pittsburgh, engr.

†Texas—U. S. Eng., Federal Bldg., Galveston, bids soon water lines, facilities. Over $15,000.

★**†Texas**—Pub. Housing Auth., NHA, 1930 Electric Bldg., Fort Worth, received no bids June 11, water, sewer and gas sys., walks, landscaping and paving, Tex. 41-134. Nunn-McGinty, 2017 W. Gray Ave., Houston, archts. R. L. Jenkins, 4316 Blossom St., Houston, engr.

★**†Tex., Corpus Christi**—City, c/o A. C. McCaughan, mayor, WW sys. imprvs., Tex. 41-238. $550,000. **FWA.** Myers & Noyes, Tower Petroleum Bldg., Dallas, and G. Blackburn, city engr., engrs. CD 6/9—ENR 6/11.

BIDS ASKED

Bids Asked June 30

†D. C., Wash.—U. S. Eng., 1st and Douglas Sts. N.W., filters, sub-station addn. alterations, Dalecarlia Filtration plant, Docket 49-119. **FWA.**

N. H., Claremont — Town, Bd. Selectmen, earth dam, relocating road for Water Dpt. $40,000. Weston & Sampson, 14 Beacon St., Boston, Mass., engrs.

Bids Asked July 7

D. C., Wash.—District Comrs., District Bldg., watermain, appurtenances, S. Capitol St., Overlook Ave. and 4 St., S.W.; watermain from 18 St. and Minnesota Ave. to Firth Stirling Ave. and Stevens Rd., S.E., W.P.A. Proj. D.C. 490101; G. M. Thornett, secy. Bd. Comrs.; adv. ENR 6/25.

LOW BIDDERS

†Alabama—U. S. Eng., Courthouse, Mobile, June 17, water supply and distr. sys., Inv. 569-42-753, from C. M. Journey Constr. Co., Hway 61, Memphis, Tenn.

†N. H., Portsmouth—City, 126 Daniels St., Portsmouth, June 12, watermain, Cont. 6, NH 27-104, Frost Point to Newcastle, from John Forward, 38 Powder House Rd., Medford, Mass. **$52,940. FWA.** F. A. Barbour, 73 Tremont St., Boston, Mass., engr.

†South Carolina—U. S. Eng., Fort Jackson, June 18, high service pump, pump house, etc., from D. M. Rickenbaker, Union, bldg., from W. H. Hand & Son, Belmont.

★**†Va., Norfolk**—At office W. H. Taylor III, dir. P. Wks., rolled earth dam, concrete facing, concrete spillway, Docket Va. 44-101, from F. J. Gannaway, Navy Yard, **$523,540. FWA.** CD 5/25—ENR 5/28.

CONTRACTS AWARDED

†Arkansas—Pub. Housing Auth., NHA, 7 and Taylor Sts., Fort Worth, Tex., water sys., sewers, streets for housing, to W. L. Sharpe Constr. Co., Sterick Bldg., Memphis, Tenn., **$155,000.** Est. $170,000. Awarded 6/3. McRae, Bair & Lefever, Gazette Bldg., Little Rock, engrs.

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, water sys., to Max F. Kemper, 3704 Clarington Ave., Los Angeles. Awarded 6/18.

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, water distr. sys. sewers, No. 518, to Max F. Kemper, 3704 Clarington Ave., Los Angeles. Bids 6/12, awarded 6/15.

†Connecticut — U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., water sys. exten., to Frank T. Westcott, 95 High St., North Attleboro, Mass. Est. over **$15,000.**

†La., Bossier City—Federal Works Agency, Fort Worth, Tex., water sys., to Boh Bros. Constr. Co., 2400 Cypress St., New Orleans, approx. **$216,000.** Est. $175,000.

Mass., Worcester—H. Green, comr. P. Wks., three 1 story, 20x25 ft., brick chlorination bldgs., to Granger Contg. Co., 894 Grafton St., $17,618; equip., to Wallace Tiernan Co., Inc., 346 Newbury St., Boston, **$31,700.** Bids 6/16. CD 6/4—ENR 6/11.

†Mississippi—U. S. Eng., Courthouse, Mobile, Ala., water tank, water distr., Inv. 569-42-747, to Carn N. George & Associates, Mobile Ala., awarded 6/17.

SEWERS, WASTE DISPOSAL

PROPOSED WORK

Kan., Kansas City—Preliminary plans storm and sanitary sewers, Quintaro Dist., northern part city. $35,900. E. I. Myers, Law Bldg., Kansas City, Mo., engr. CD 3/3—ENR 3/5.

Mo., Overland (St. Louis P. O.)—Iveland Sanitary Sewer Dist., c/o E. A. Fulton, engr., 3 S. Meramac Ave., Clayton, St. Louis, voted $20,000 bonds sanitary sewerage sys., sewage treatment plant, etc., Overland and Locust Groves Dists. $30,000. Applying for FWA aid. CD 5/28—ENR 6/4.

Pa., Corry—G. B. Porter, city clk., municipal sewerage sys. Project in abeyance. FWA gr. cancelled. Havens & Emerson, Leader Bldg., Cleveland, O., engrs. D. Williams, city engr. CD 5/20—ENR 5/28.

†Ore., Hermiston—City Recorder, City Hall, rejected bids June 12, sewerage sys., deep-well pump, controls, pumphouse, centrifugal pump. Will readvertise. **FWA.** CD 5/28—ENR 6/4.

†Texas—U. S. Eng., Fort Sam Houston, bids soon, sanitary sewerage sys. $60,000; natural gas distr. sys. and facilities, $25,000; water distr. sys. and facilities, $35,000, all (P2-1) (Spec. 42-108).

†Texas—U. S. Eng., Fort Sam Houston, bids soon storm sewers, Spec. 42-144.

Tex., Sherman—J. C. Bryant, mayor, sewage disposal plant, $108,694. Applying for WPA funds. Koch & Fowler, Great Natl. Life Bldg., Dallas, engrs.

†Texas—U. S. Eng., Federal Bldg., Houston, Proj. 4, sanitary sewer lines. Over $25,000.

†Tex., Garland—City, J. Stultz, secy., received no bids June 6, sanitary sewerage sys. imprvs., Tex. 41-461. **$50,392. FWA.** H. B. Gieb & Co., 1207 Texas Bank Bldg., Dallas, engrs. CD 5/26—ENR 5/28.

BIDS ASKED

Bids Asked July 2

Colo., Denver—City and Denver Co., City & County Bldg., c/o G. Crammer, mgr. Park & Imprvs., sewage treatment plant. $125,000. Black & Veatch, 4706 Bway., Kansas City, Mo., designing engrs. A. K. Vickery, city engr. CD 6/9—ENR 6/11, under BA.

Bids Asked July 8

Calif., San Bernardino—Bd. Water Comrs., City Hall, sewage treatment plant, over $25,000. Currie Eng. Co., Andreson Bldg., engrs.

Bids Asked July 9

N. Y., Great Neck—Bd. Sewer Comrs., Great Neck, sewage treatment plant, **$200,000.** C. H. Watson, 19 Barstow Rd., superv. engr. CD 6/10/41—ENR 6/12/41.

LOW BIDDERS

†California—U. S. Eng., Wright Bldg., Sacramento, June 15, sewage disposal plant, from Campbell Constr. Co., 809 R St., Sacramento, **(1) $95,618 (1a) $56,936 (1b) $57,801.**

★**†Indiana**—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago, Ill., June 11, sewers, water distr. lines, electric lines, roadways, walks, etc., from E. A. Mariana Co., Richmond. **$566,538.** H. B. Steeg & Associates, 129 E. Market St., Indianapolis, engr.

Michigan—State Hy. Dpt., Lansing, June 17, pumphouse, on Detroit Industrial Expressway, Wayne Rd., Wayne Co., from **D. T. Frank,** East Lansing, **$27,966.** CD 6/10.

†Tex., Dickinson—Galveston Co. Water Control & Imprvt. Dist. 1, c/o D. V. De Pasquale, June 10, sewage disposal plant, Tex. 41-346, from J. W. Zempter Const. Co., 2115 Avenue F, Galveston, **$30,700. FWA.**

†Tex., Grand Prairie—City, c/o G. H. Turner, mayor, June 10, sewage treatment plant, Tex. 41-373, from B. G. Welborn, 1319 Wilbur St., Dallas, **$75,000.** CD 6/26—ENR 5/28.

†Tex., Pasadena—City, c/o D. L. Atkinson, mayor, June 12, sewage disposal plant, Tex. 41-246, from T. Jensen, Pasadena. **$159,630. FWA.** CD 6/2—ENR 6/4.

†Tex., West University Place—City, c/o F. M. Mainous, mayor, June 13, sewage disposal plant addns., Tex. 41-249, from J. Holland, 2739 Centenary St., Houston. **$139,843. FWA.** Bids 6/13. CD 6/2—ENR 6/4.

CONTRACTS AWARDED

†Ala., Sheffield—City, c/o Mayor, sewer exten., Project Ala. 1-187, to A. H. Dimiljan, Woodward Bldg., Birmingham, about **$34,000. FWA.** J. W. Goodwin Eng. Co., Martin Bldg., Birmingham, engr.

†Ala., Sheffield—E. S. Enocher, city clk., sewer exten., Proj. 1-203, to A. H. Dimiljan, Woodward Bldg., Birmingham. **FWA.** CD 3/25—ENR 4/2.

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, sanitary sewers, water extens. No. 508, to A. C. Bussey, 4491 Brockton Ave., Riverside. Est. over **$25,000.** Bids 6/12, awarded 6/16.

†Fla., Starke—City, sewers, Fla. 8-174, to J. B. McCrary Co., 22 Marietta St. Bldg., Atlanta, Ga., **$72,000;** sewage disposal plant, to Boyd & Goforth, 617 N. Smith St., Charlotte, N. C., **$158,000. FWA.** CD 11/7—ENR 11/13.

†La., Bossier City—Federal Works Agency, Fort Worth, Tex., sanitary sewers, to W. H. O'Toole, DeRidder, approx. **$246,000.** CD 4/27—ENR 4/30.

SEWERS, etc. (Contracts Awarded, Cont'd.)

†**Massachusetts** — Industrial Co., sanitary sewer and drainage sys., to Richard White Sons, Inc., 67 Cherry Pl., Newton. Est. **$25,000**. CD 3/31—ENR 4/2.

N. J., Bloomfield—Town, Town Hall, sheeting, rein.-con. storm sewers, manholes, repaving, etc. Bay, Broughton and Mt. Vernon Aves. **WPA. $55,500.** C. Malstrom, Orange and N. 6 Sts., Newark, WPA. engr.

Tex., San Antonio—C. K. Quin, mayor, Imprv. sanitary sewer collecting sys., **WPA. $196,000.** CD 6/16—ENR 6/18.

†**Texas**—U. S. Eng., M. & M. Bldg., Houston, sewage treatment plant, Inv. 359-42-623, to J. G. Holland, 2938 Centenary St., Houston. **$78,000.**

†**Wisconsin**—U. S. Eng., 408 Federal Bldg., Milwaukee, digester covers, to Pacific Flush Tank Co., 4241 N. Ravenswood St., Chicago, Ill.***sanitary sewers, to Gray-Robinson Const. Co., Manitowoc***sanitary sewerage sys., to Fry & Kain Constr. Co., 411 W. Gier St., Lansing, Mich.***installing sewage ejector, to Hyland, Hall & Co., 218 N. Bassett St., Madison***force main and temporary outfall sewer installation to George Carlson Co., 4041 N. Montreal St., Milwaukee.

BRIDGES, GRADE CROSSINGS

PROPOSED WORK

★**Illinois**—State Dpt. P. Wks. & Bldgs., Div. Hys., Springfield, repairing sanitary and ship canal bridge, Western Ave., Chicago. $500,000. W. W. Polk, Centennial Bldg., Springfield, engr.

†**Louisiana**—U. S. Eng., foot of Prytania St., New Orleans, reconstructing pontoon highway bridge, Lafourche Parish.

N. J., Newark—Bd. Freeholders, Essex and Hudson Counties, Hall of Records Bldg., Newark, extensive repairs to Bridge St. bridge, between Newark and Harrison. **$215,000.** Waddell & Hardesty, 101 Park Ave., New York, N. Y., engrs. CD 12/15—ENR 12/18.

O., Canton—Bridge over Creek, 11 St. SE, $78,299; bridge over 19 St. at Creek, $40,039. J. A. Shisler, city engr.

O., Dover—Tuscarawas Co., New Philadelphia and State, steel, concrete bridge over Sugar Creek, State Route 21, near foot W. 3 St. Over $40,000. G. Arnold, New Philadelphia, engr.

†**Texas**—U. S. Eng., Citizens Bank Bldg., Denison, bids soon, rein.-con. and earth overpass. $175,000.

BIDS ASKED

Bids Asked June 30

Que., Ste. Sophie—Dpt. Pub. Wks., Quebec City, rein.-con. bridge over Achigan River. $40,000.

Bids Asked July 2

†**D. C., Wash.**—Pub. Bldgs. Adman., North Interior Bldg., Wash., D. C., bridges, 4th floor level, Navy Dpt. Temporary Bldg.

Bids Asked July 3

Kansas—State Hy. Dpt., Parsons, two 28 ft., and one 35 ft. continuous slab spans on DAWI-3-D, Labette Co. R. C. Keeling, Topeka, engr.

Bids Asked July 10

Kentucky—Dpt. Hys., Frankfort, twelve 30 ft. and one 50 ft. concrete span bridge, pile bents at Highland Creek, Henderson-Morganfield Rd., DA-WR 9C-1, Henderson Co.; five 50 ft. concrete spans bridge near Tip Top, DA-WR 6, S.P. 82-283, Meade Co.

LOW BIDDERS

California — State Div. Hys., Sacramento, June 17, lift span bridge, 116 timber trestle spans, 19 ft. long, concrete piers, over Napa River, west city limits, Vallejo, Solano Co. from E. E. Smith, Box 404, Berkeley, **$437,594.**

D. C., Wash. — District Comrs., District Bldg., June 16, bridge carrying Portland Ave. over South Capitol St., from Claverock, Inc., 420 Lexington Ave., New York, N. Y. **$154,299.** CD 6/1—ENR 6/4.

Michigan—State Hy. Dpt., Lansing, June 17, garde separation (underpass) on U. S. 112 relocated and Michigan Central R.R., Wayne Co., from L. W. Lamb, Holland, **$262,671.** CD 6/10.

South Carolina—State Hy. Dpt., Columbia, June 16, 4 rein.-con. bridges, Dorchester and Orangeburg Counties, from J. W. Barnwell, Jr., Columbia, **$106,061**; 180 ft. rein.-con. bridge, Berkeley and Charleston Counties, from Espy Paving & Const. Co., 108 E. Bay St., Savannah, Ga., **$31,862.** CD 6/5—ENR 6/11.

CONTRACTS AWARDED

★†**Florida**—U. S. Eng., Courthouse, Jacksonville, 5 bridges. Inv. 436-42-neg., to Murphy Const. Co., Clare Ave., West Palm Beach, less than **$1,000,000.** Awarded 6/15.

O., Martins Ferry—Pennsylvania R.R. Co., Pennsylvania Sta., Pittsburgh, Pa., C. I. Leiper, ch. engr., rebuilding 3 railway bridges, near Martins Ferry and Florence, own forces. **$25,000.** CD 6/8—ENR 6/11.

Oklahoma—State Hy. Dpt., Oklahoma City, June 16, bridge over Bird Creek, Tulsa Co., to J. Briscoe, Stillwater, **$59,402.** Est. $48,700. Bid 6/16, awarded 6/19. CD 6/9.

Ont., Kincardine—Kincardine Twp., 50 ft. rein.-con. rigid frame bridge, to G. A. Gibson, Wroxeter, **$24,750.** Est. $25,950. G. E. Stephenson, Colborne St., Walkerton, engr.

STREETS AND ROADS

BIDS ASKED

Bids Asked June 30

N. J., New Brunswick—Town, Town Hall, grading, paving 1,500 ft. road running from Jersey Ave.

★**Ohio**—State Hy. Dpt., Columbus, bituminous treating 33.87 mi. sects. of State Hys. 579, 164, 171, 592 and 191, Shelby, Auglaize, Mercer and Champaign Counties, $57,109; 15.15 mi. sects. S. Hys. 32, 544, 24, 540 and 465, Medina and Wayne Counties, $35,711; 25.73 mi. S. Hys. 714, 497, 545 and 471, Logan, Clark and Champaign Counties, $42,318; grading, drainage structures, concrete paving, roadside imprvt, 1.813 mi. Sects. P and D of S.H. 86 and Sect. D of S.H. 89, Columbiana Co., $135,600; asphaltic concrete resurfacing 2.005 mi. Sect. Garfield Heights of S.H. 12, Cuyahoga Co., $45,400; 6.821 mi. Sects. Ashlay, K, F and J of S.H. 332, U.S. 42, Delaware and Morrow Counties, $65,500; 3.018 mi. Sects. B, C and Mentor-on-The-Lake, of S.H. 520, Lake Co., $31,500; 3.689 mi. Sects. F-1, K, M-1 and L of S.H. 97, U.S. 224, Medina Co., $39,470; 8.416 mi. Sects. E, E-2 and H-1 of S.H. 211, U.S. 127 and 1.021 mi. Sect. H of S.H. 126, U.S. 25, Mercer and Auglaize Counties, $92,100; 7.131 mi. Sects. D, C and 1-2, and 1-1 of S.H. 115, Union, Delaware and Marion Counties, $58,000; widening, asphaltic concrete resurfacing 4.283 mi. Sects. G and A-2 of S.H. 266, Seneca Co., $71,100; grading, drainage structures, concrete paving 2.501 mi. Sects. Avon and Sheffield of S.H. 827, Lorain Co., $125,500; grading, drainage structures, bituminous road mix surfacing 0.812 mi. Sects. Zaleski and B of S.H. 597, Vinton Co., $37,800; widening, asphaltic concrete resurfacing 0.804 mi. Sect. T of S.H. 7, U.S. 52, Scioto Co., $12,400; asphaltic concrete widening 1.297 mi. Sect. K of S.H. 365, U.S. 50 and 35, Ross Co., $13,600; 1.928 mi. Sects. Bay and Avon Lake of S.H. 3, U.S. 6, Cuyahoga and Lorain Counties, $24,100.

★**Pennsylvania** — State Hy. Dpt., I. L. Hughes, secy., Harrisburg; concrete paving and 2 concrete structures, etc., 29,550 ft. Legislative Route 43, Sect. 1, Traffic Route 30, Franklin Twp., Adams Co., over $500,000; 19,083 ft. Legislative Route 113, Sect. 11, Traffic Route 40, West Pike Run Twp. Centerville Boro, Washington Co., over **$500,000**; 618 ft. Legislative Route 04102, Sect. 1-A, Darlington Twp., northwest Darlington Boro line, Beaver Co., under $25,000; 3,701 ft. Legislative Route 130, Spur A, Traffic Route 420, Tinicum Twp., Delaware Co., over $25,000; 5,950 ft. Legislative Route 25117, City of Erie, on E. 12 St., Erie Co., over $25,000; 2,071 ft. Legislative Route 67053, Sect. 1, City of Phila., on Island Ave., Philadelphia Co., over $25,000. T. C. Frame, ch. engr.

West Virginia—State Road Comn., Charleston, surface treating 8.88 mi. Oak Hill-Kincaid Rd., S.P. 3692 and 3693, and 11.39 mi. Cliff Top-Layland Rd., S.P. 2278, Fayette Co.; 7 mi. Mineral Co. line-West Romney Rd., S.P. 3011 A and B, Hampshire Co.; 5.969 mi. Bridgeport-Taylor Co. line Rd., S.P. 2280, Harrison Co.; 6.7 mi. Matoaka-Kegley Rd., S.P. 227-A, Mercer Co.; 10.3 mi. New Creek-Hampshire Co. line Rd., S.P. 3010, Mineral Co.; 4.6 mi. U.S. 19 to Lemly Siding Secondary Rd., S.P. 5496, Monongalia Co.; 9.178 mi. Newburg-Arthurdale Rd., S.P. 236 A and B, and 4.033 mi. U.S. 50, toward Tucker Co. line Rd., S.P. 3512, Preston Co.; 6.1 mi. Glen-Morrison-Glen Rogers Secondary Rd., S.P. 5018, Wyoming Co.; ashler masonry and concrete substructure Matewan Bridge S-1562, over Tug Fork S.P. 5545, Mingo Co.

Wisconsin — State Hy. Comn., Madison, gravel or crushed stone surfacing 3.219 mi. U.S. Hy. 10, Contr. 1, Durand-Ellsworth Rd., West County Line-Arkansaw Rd., Pepin Co.; bituminous surface course 11.7 mi. Oshkosh-New London Rd., Greenville-New London Rd., S.P. 3869, U.S. Hy. 45, Outagamie Co.

Bids Asked July 1

Ill., Chicago—Cook Co., 535 County Bldg., limestone rock asphalt paving 1.0003 mi. Sect. 045-0101-15 d, 1.0085 mi. Sect. 010-0607-15 d 1.6246 mi. Sect. 144-0202 1-15 d; 0.6075 mi. Sect. 115-0103-15 d, 0.645 mi. Sect. 018-0405-15 d, 2.7321 mi. Sect. 119-0505.1-15 d; bituminous surfacing 4.1307 mi. Sect. 18 RS-MFT, 0.4833 mi. Sect. 18 RD-MFT; bituminous plant mix surfacing 1.5551 mi. Sect. 205-1112-15 d, 1.4715 mi. Sect. 036-0708-15 d, 1.4691 mi. Sect. 222-0305.1-15 d; bituminous plant mix seal 2.1041 mi. Sect. 205-0709-15 d, 1.0318 mi. Sect. 053-0405-15 d, 1.0841 mi. Sect. 162-0607-15 d; tar concrete surfacing 1.4733 mi. Sect. 081-0304.1, 109-0303.1-15 d, 0.9815 mi. Sect. 109-0102.1-15 d, 2.425 mi. 126-0103.2-15 d; removing, replacing brick handrail Burnham Ave. Bridge, Sect. 067-0808-MFT and 069-0809-MFT; removing curb and gutter Sect. 108-4-4-15 d; concrete paving 0.2413 mi. Sect. 15-CS. G. H. Baker, Centennial Bldg., Springfield, state engr. co. roads and city streets.

Md., Baltimore — Bd. Awards, City Hall, paving streets, Contr. C.C. 769. G. A. Carter, Hys. engr.

Bids Asked July 2

★**Arkansas** — State Hy. Dpt., Little Rock, gravel surfacing 12.67 mi. State Hy. 15 in Luxora, 8.8 mi. State Hy. 79 in Clarendon, paving 14 mi. Lake Village to McGehee Rd., $600,000. W. W. Zass, Little Rock, engr.

Louisiana—Dpt. Hys., W. Prescott Foster, dir., Baton Rouge, concrete paving 12.7 mi. Gardner-Alexandria Hy., Route C-2080, Rapides Parish.

Bids Asked July 3

Georgia—State Hy. Dpt., W. E. Wilburn, chn., concrete paving 8.781 mi. Bartow-Eufaula Rd., Star Route 131, McIntosh Co.; 0.808 mi. bridge over Ogeechee River, 1 mi. flow bridge at Ogeechee River and bridge culvert on Statesboro-Savannah Rd., Bryan and Effingham Counties; grading, concrete paving 5.141 mi. Barnesville-Zebulon Rd., Lamar Co.

Kansas—State Hy. Dpt., Parsons, asphalt surface treating, grading 0.505 mi. DAWI-3-B, 0.504 mi. DA WI-3C, 0.997 mi. DAWI-3D, all Labette Co. R. C. Keeling, Topeka, engr.

Bids Asked July 7

Calif., Alameda—Imprv. Encinal Ave. between High St. and Fernside Blvd. $25,000.

Washington—State Hy. Dpt., B. Bantz, dir., Olympia, asphaltic concrete paving 1 mi. Primary State Hy. 1, Tenino vic., Thurston Co.; grading, clearing, draining, surfacing, manufacturing mineral aggregates 5.6 mi. Secondary State Hy. 5-A, Tenino to Rainier, Thurston Co.; clearing, grading, draining, surfacing, constructing treated pile and timber trestle 10.58 mi. Secondary State Hy. 9-A, Clallam Bay Junction to Sappho, Clallam Co.; manufacturing crushed stone surfacing and mineral aggregates on Primary State Hy. 3, and Secondary State Hy. 3-H, Rosalia to Garfield and Fairfield S., Whitman and Spokane Counties; constructing nonskid single seal treatment 22.8 mi. Primary State Hy. 3 and Secondary State Hy. 11-C, St. John to Steptoe and Colton to Idaho state line, Whitman Co.; clearing, grading, draining, surfacing, manufacturing mineral aggregates 4.8 mi. Primary State Hy. 12, and Secondary State Hy. 12-A, Skinville cutoff to Chinook River and Raymond West, Pacific Co.; surfacing and manufacturing mineral aggregates 7.25 mi. Secondary State Hy. 3-A, Alfalfa to Satus, Yakima Co.; surfacing, constructing light bituminous, nonskid seal treating 14.8 mi. Secondary State Hy. 9-C, Carlisel to Pacific Beach to Copalis, Grays Harbor Co.; manufacturing mineral aggregates and constructing nonskid seal treatment 37.4 mi. Secondary State Hy. 11-B, Washtucna to Dusty, Adams and Whitman Counties.

Bids Asked July 8

California—State Div. Hys., Sacramento, plant mix resurfacing 28.8 mi. hy. between Santa Margarita and northerly boundary, San Luis Obispo Co.; grading, applying penetration treatment 2.6 mi. hy. between 2 mi. south of Tunitas and 1 mi. south of Lobitos, San Mateo Co. C. H. Purcell, hy. engr.

Louisiana—Dpt. Hys., W. Prescott Foster, dir., Baton Rouge, 5,216 cu. yd. washed gravel, S.P. 901-01-03, Madison Parish; 1,760 cu. yd. S.P. 901-01-13, Assumption Parish; 6,919 cu. yd. S.P. 901-01-14, Concordia Parish.

Bids Asked July 9

California—State Hy. Dpt., C. H. Purcell, engr., 808 State Bldg., Los Angeles, widening, portland cement and asphaltic concrete paving 1.3 mi. Sepulveda Blvd. through Hermosa Beach, VII-LA-58-HMB, RDOB, Los Angeles Co.; concrete paving 0.5 mi. Continela Ave., Slauson Ave. Hy., VII-LA-158-B, Los Angeles Co., each over $25,000.

Bids Asked July 10

Kentucky—Dpt. Hys., Frankfort, grading, draining, bridging, high type surfacing 0.649 mi. Elizabethtown-Mumford Rd., S.N. 169C(2), S.P. 47-119, Hardin Co.; high type surfacing 0.597 mi. Bowling Green-Franklin Rd., SN-FA 370C(1), S.P. 114-186, Warren Co.; resurfacing 0.169 mi. Central St. in Catlettsburg, S.P. 10-45, Boyd Co.; rock asphalt seal type construction 9.271 mi. Danville-Stanford Rd., MP 11-120-A, Boyle-Lincoln Co.; bituminous treating 6.772 mi. Louisville-Taylorville Rd., MP 56-98-H&F, MP 56-1098-AC&D; drives at Kentucky Childrens Home at Lyndon, RP 56-278, both Jefferson Co.; 3.28 mi. Crestwood Lake-Louisville Rd., MP 93-116-A, Oldham Co.; rock asphalt seal type surfacing 10.549 mi. Stamford-Mt. Vernon Rd., MP 69-1070-D, 69-7-C, 69-2070-B, Lincoln Co.

Minnesota—State Hy. Dpt., St. Paul, concrete paving etc., 3.9 mi. S.P. 6202-05, TH 8-63, 6203-08, TH 8-63, 6205-05, TH 10-62, 6204-02, TH 10-62, 6224-02, TH 96-96 and 6205-06, TH 10-62, DA-WI-1, WA-WI-2, DA-WI-3, and S.P. 6224-02, TH 96-96; imprv. 2 mi. S.P. 7801-07, TH 28-28; 7 mi. S.P. 7002-08, TH 21-13; 10.5 mi. S.P. 6303-13, TH 59-174; 8.2 mi. S.P. 2905-09, TH 71-4; 3 mi. S.P. 2316-06, TH 139-7; 9.4 mi. S.P. 7201-12, TH 5-121; 6.1 mi. S.P. 2101-08, TH 27-205; 11 mi. S.P. 2722-18, TH 55-188; 0.4 mi. S.P. 7807-05, TH 117-131. Bids June 12, rejected. J. T. Ellison, ch. engr. CD 5/26—ENR 5/28.

STREETS, etc. (Bids Asked, Cont'd.)

†**Tennessee**—Tennessee Valley Auth., Knoxville, stabilized crushed stone base and bituminous surface course for roads, South Holston and Fort Loudon Reservoir areas, Requisitions 337004, and 337028. C. H. Garity, dir. Purchases, Knoxville; adv. ENR 6/25.

Bids Asked

California—State Hy. Dpt., Sacramento, cancelled bids to have been opened July 9, grading, asphaltic concrete on concrete surfacing 1.8 mi. hy. between Mandos Curve and Pitas Point, Ventura Co. CD 6/22.

Ill., Cicero—A. J. Krupicka, city clk., returned bids unopened June 4, concrete paving 26,200 sq. yd. Sect. 28-29-CS. Project abandoned. CD 5/19—ENR 5/21.

Ohio—State Hy. Dpt., Columbus, rejected bids June 3, grading, constructing continuous concrete beam bridge, Part 2 Sect. B, Sect. D of S.H. 322, Portage and Trumbull Counties. CD 6/9—ENR 6/11, under LB.

★†**Texas**—U. S. Eng., Fort Sam Houston, roads, asphalt paving, etc. $800,000.

†**Washington**—U. S. Eng., 800 3 Ave., Seattle, roads, walks, drainage sys.

LOW BIDDERS

Alabama—W. G. Pruett, dir. State Hy. Dpt., Montgomery, June 12, imprv. 4.908 mi. Macon Co., and 1.126 mi. Talladega Co., from R. T. Smith Contr. Co., 215 Atlanta Ave., Atlanta, Ga., **$184,296** and **$74,382** respectively. CD 6/4.

†**Alabama**—U. S. Eng., Courthouse, Mobile, June 13, grading, drainage, fencing, Inv. 562-42-623, from Foster Creighton Co., American Natl. Bank Bldg., Nashville, Tenn.

★**California**—C. H. Purcell, engr. State Hy. Dpt., Sacramento, June 17, imprv. 7.9 mi. Yuba Co., from Hemstreet & Bell, 12 and F Sts., Marysville, **$476,225*****5.6 mi. Kern Co., from Louis Biasotti & Son, Box 587, Stockton, **$157,920*****6 mi. Santa Barbara Co., from L. A. Brisco, Box 656, Arroyo Grande, **$49,789.** CD 6/1—ENR 6/4.

★**Connecticut**—State Hy. Dpt., Hartford, June 15, imprv. 17,054 ft. hy. Groton and Ledyard, from Oneglia & Gervasini, Inc., Casson Ave., Torrington, **$423,668;** paving 3,217 ft. hy., and rein.-con. paving and rigid frame bridge 5,105 ft. hy. Groton, from A. I. Savin Constr. Co., 10 Village St., East Hartford, **$398,936.** Bids withdrawn June 15, paving 1,362 ft. hy. East Hartford, will readvertise. CD 6/9—ENR 6/11.

D. C., Wash. — District Comrs., District Bldg., June 15, repairing 1,000 cu. yd. concrete roadway and alley pavements, and 10,000 sq. yd. concrete sidewalks, from E. B. Donaldson & Bros., 12 St. and Brentwood Rd. N.E. **$54,918.** CD 6/8.

★**Illinois**—State Dpt. P. Wks. & Bldgs., Div. Hys., Springfield, June 19, from Walker Constr. Co., Mattoon, imprv. 11,870 sq. yd. Franklin and Hamilton Counties, **$89,389;** 8,940 sq. yd. Franklin Co., **$74,551;** patching Dist. 9, Combination 1, Franklin and Hamilton Counties, **$162,940*****from Chernus Constr. Co., 918 N. 11 St., St. Louis, Mo., 7,880 sq. yd. Williamson, Saline and Franklin Counties, **$59,010*****from Chas. B. Cochran Corp., Marion, 9,610 sq. yd. Williamson and Saline Counties, **$78,821*****from R. W. Ford, Marion, 5,190 sq. yd. Union, Pulaski and Alexander Counties, **$37,028*****from Wm. Lough & Sons, Marion, 4,820 sq. yd. Union, Jackson and Alexander Counties, **$39,035*****from Hurden Constr. Co., 614 Reisch Bldg., Springfield, 7,000 sq. yd. Sangamon, Morgam and Scott Counties, **$58,235*****from Berenz & Son, Bloomington, 0.46 mi. McLean Co., **$28,596*****from States Improvement Co., 160 N. La Salle St., Chicago, 8,360 sq. yd. Cook Co., **$44,809;** from Madison Constr. Co., Edwardsville, 28,472 sq. yd. Clinton and St. Clair Counties, **$152,395*****from Granite Bituminous Paving Co., 2943 Duncan Ave., St. Louis, Mo., 10.7 mi. Clinton Co., **$340,897.** Received no bids June 19, imprv. 11,650 sq. yd. Fulton and McDonough Counties, 16,156 sq. yd. Fulton and Schuyler Counties, 5,240 sq. yd. Gallatin and Saline Counties, 10,195 sq. yd. Greene and Jersey Counties, 11,260 sq. yd. Johnson and Massac Counties, 6,219 sq. yd. Knox, Peoria and Fulton Counties, 4,560 sq. yd. Montgomery Co., 6,955 sq. yd. Perry and Randolph Counties, 12,900 sq. yd. Perry and Washington Counties, 14,380 sq. yd. Randolph and Jackson Counties, 12,540 sq. yd. Saline, Gallatin, White, Williamson and Johnson Counties. Withdrew from letting of June 19, patching combination 4, Union, Jackson, Alexander and Pulaski Counties, Combination 2, Gallatin, Saline, White, Williamson and Johnson Counties, Combination 3, Perry, Randolph and Washington Counties, Combination 5, Williamson, Saline and Franklin Counties. CD 6/10—ENR 6/18.

Louisiana—State Dpt. Hys., Baton Rouge, June 12, imprv. 1.515 mi. Jefferson Parish, from W. L. Stevens, 202 Whitney Bldg., New Orleans, **$471,868.**

★**Michigan**—State Hy. Dpt., Lansing, June 17, imprv. 13.003 mi. Lenawee and Washtenaw Counties, from Ann Arbor Constr. Co., Ann Arbor, **$209,274*****7.759 mi. Lenawee Co., from Cooke Contg. Co., 1216 Penobscot Bldg., Detroit, **$157,490*****8.311 mi. Washtenaw Co., from Detroit Asphalt Paving Co., 702 Transportation Bldg., Detroit, **$149,396.** CD 6/10.

Minnesota—State Hy. Dpt., St. Paul, June 12, imprv. 12.8 mi. S.P. 0901-26, Divs. A, B and C, TH 23-185, S.P. 0901-24, TH 23-185 and S.P. 0901-27, TH 23-185, SN-A-FAP 520 C, from Hector Constr. Co., Hector, **$169,292***** imprv. Group 1, from Iowa Road Building Co., 1495 Keo Way, Des Moines, Ia., **$47,648***** Group 2, from J. H. Ganley, 2336 Hampden Ave., St. Paul, **$47,124*****Group 3, from R. C. Jones, Deerwood, **$53,585*****Group 4, from Duininck Bros. & Gilchrist, Olivia, **$46,792***** Group 7 from H. J. Dunn, 436 Bay St. St. Paul, **$27,557*****Group 6, to J. W. Craig, 1814 N.E. California St., Minneapolis, **$38,379.** CD 5/26 and 5/27—ENR 5/28 and 6/4.

Nebraska—State Dpt. Roads & Irrigation, Lincoln, June 11, imprv. 14.5 mi. hy. SN-FA 5, Columbus-Madison Rd., from Yant Constr. Co., 917 N. 45 St., Omaha, **$288,365.** Rejected bids June 11, imprv. 3.2 mi. SN-FA 78 and SN-FA 235-A, Millard-Wahoo Rd.; received no bids June 11, imprv. 7.3 mi. SN-FA 143-A and SN-FA 143-G, Fairmont-McCool Junction Rd. CD 6/11—ENR 6/4.

★**New Jersey**—S. Miller, Jr., comr. State Hy. Dpt., Trenton, June 16, imprv. Sects. 3 and 4A road, Spicertown, Morris Co., from Franklin Contg. Co., 20 Washington Pl., Newark, **$824,871.** CD 6/10.

★**South Carolina**—State Hy. Dpt., Columbia, June 16, imprv. 8.223 mi. Greenville and Spartanburg Counties, and 1.118 mi. Oconee Co., from Ballenger Paving Co., Greenville, **$487,516** and **$46,306 respectively;** 6.654 mi. Sumter Co., from A. Harwell, Carolina Life Bldg., Columbia, **$42,366.** CD 6/5—ENR 6/11.

South Dakota—State Hy. Comn., Pierre, June 16, seal on bituminous treated gravel surfacing 14.834 mi. hy. AW-FAP's 150A(2) and 209D(3); Fall River Co., from G. S. Roberts Constr. Co., Rapid City, **$87,586;** 11.029 mi. AW-FAP's 209A(3), 209C(2), Fall River Co., from C. H. Lien Constr. Co., Rapid City, **$63,682.**

Virginia—Dpt. Hys., Richmond, June 18, imprv. 2 mi. Routes 167, 168 and 278, Elizabeth City Co., from R. W. Mitchell, Hilton Village, **$93,432.** CD 6/4; imprv. 1.3 mi. Route 351, Norfolk Co., from R. K. Williams, 104 Hillcrest Ave. W., Richmond, **$169,975.** CD 6/11.

CONTRACTS AWARDED

★**Georgia**—State Hy. Comn., W. E. Wilburn, chn., Atlanta, imprv. 3.049 mi. Chattahooche Co., to Hugh McMath Constr. Co., Brenan Rd., Columbus, **$511,579.** Est. **$489,000.** Bids 6/12. CD 6/16—ENR 6/18, under LB.

Ill., Peoria—Peoria Co., bitum. seal coat 254,851 sq. yd., to L. L. Pelling Co., 5515 Rogers Ave., Chicago, **$43,125.** Bids 6/4. CD 5/26—ENR 5/28.

Ind., Indianapolis—Comrs. Marion Co., roads around water reservoir, to Smith & Johnson Co., 1799 Kentucky Ave., **$109,600.** Est. $125,000.

Ia., Clinton—Bd. Supervs. Clinton Co., surfacing 54.43 mi. roads, to C. B. DeWees, Marion, **$42,658.** Bids 6/15, awarded 6/15. CD 6/9.

Ia., Eldora—Bd. Supervs. Hardin Co., graveling 42.452 mi. and second course graveling 69.3 mi. roads, to Beu & Sons, Sumner. **$42,737.** Bids 6/4. CD 5/26—ENR 5/28.

Kentucky—Dpt. Hys., Frankfort, imprv. 5.018 mi. Munfordville-Elizabethtown Rd., SN-FA 169-E (1), S.P. 50-20; 62-261; 47-119, Hart, Larue and Hardin Counties, to Fuller-Davies Co., Kentucky Road Oiling Co. and F.M.D. Constr. Co., Frankfort, **$336,597.** CD 6/2—ENR 6/4.

Minnesota—State Hy. Dpt., St. Paul, imprv. 134.91 mi, Group 5, Dist. 7, to C. L. Stodolka, Little Falls, **$57,067*****66 mi. S.P. 7702-12, TH 10-2, to J. Mirau, Crosby, **$29,532.** Bids 6/12. Rejected bids 6/12, imprv. 8.7 mi. S.P. 0704-09, TH 22-39. CD 5/26—ENR 5/28.

Missouri—State Hy. Comn., Jefferson City, imprv. 2.451 mi. Jackson Co., to J. A. Tobin Constr. Co., 3700 Rainbow St., Kansas City, Mo., **$228,181.** Bids 6/5, awarded 6/9. CD 5/26—ENR 5/28.

†**New Jersey**—U. S. Eng., 120 Wall St., New York, N. Y., grading, gravel and penetration asphalt surfacing roads nad walks to Santaniello Bros., 34 Whyte St., Jersey City.

N. J., Atlantic City—Atlantic Co., Court House, grading, removing rails, resurfacing hy. from Absecon to Somers Point. **WPA. $108,670.** D. W. Haining, 930 Atlantic Ave., WPA engr.

N. J., Neptune and Wall—Towns of Neptune and Wall, Town Hall, Neptune, grading, 1½ in. bituminous concrete surfacing, storm drains, manholes, catch basins, headwall, etc., Brighton Ave. from State Hy. 33 to Shark River Bridge and River Rd. from Shark River Bridge to County Rd. **WPA. $51,757.** J. H. Weitzen, Chestnut and Hamilton Aves., Trenton, WPA engr.

N. J., Trenton—Mercer Co., Court House, bituminous surface treating 30 mi. roads, to Barrett Paving Co., 51 W. State St. **$25,000.** Bids 6/16. CD 6/9—ENR 6/11.

Ohio — State Hy Dpt., Columbus, imprv. 5.741 mi. Clinton Co., to Clinton Const. Co., Wilmington, **$25,108,** est. $25,110***5.266 mi. Fulton and Lucas Counties, to S. E. Johnson Co., 218 Terminal Bldg., Toledo, **$154,451,** est. $155,000***4.494 mi. Harrison Co., to Tri-State Asphalt Corp., S. Broadway, Martins Ferry, **$43,106,** est. $43,860***2.51 mi. Lawrence Co., to Middle States Bituminous Corp., P. O. Box 267, Ironton, **$30,599,** est. $30,600***6.533 mi. Ross Co., to Brewer & Brewer, Sons, Inc., 81 N. Water St., Chillicothe, **$19,364,** est. $49,900***35.6 mi. Ashtabula Co., to Troyer Contg. Co., Metropolitan Bldg., Akron, **$44,632,** est. $44,647***33.316 mi. Trumbull Co., to Mahoning Contg. Co., 616 Porter St. N.E., Warren, **$34,639,** est. $34,668. Grand total $381,899. State Hy. Dpt., Columbus, cancelled bids to have been opened June 16, imprv. 7.249 mi. Butler and Warren Counties; 0.471 mi. Butler Co. Received no bids June 16, imprv. hys., Washington, Lucas and Ottawa and Coshocton and Muskingum Counties. CD 6/5—ENR 6/11.

★**Oklahoma** — State Hy. Dpt., Oklahoma City, imprv. 6.312 mi. Adair Co., also farm-to-market road, northeast of Pensacola, Mayes Co., to J. W. Moorman & Son, Insurance Bldg., Oklahoma City, **$90,053** and **$62,710** respectively, est. $85,513 and $52,510 respectively***6.829 mi. Garvin Co., to J. Briacoe, Stillwater, **$116,324,** est. $102,225***7.978 mi. Greer Co., to Lewis Constr. Co., 501 Surety Bldg., Muskogee, **$132,381,** est. $134,229***7.799 mi. Jefferson Co., to C. E. Merveldt, El Reno, **$138,313,** est. $127,600. Grand total $539,781. Bids 6/16, awarded 6/19. CD 6/9.

Okla., Tulsa—Tulsa Co., Tulsa, Part 5, concrete paving 3.5 mi. roads, to Standard Paving Co., 2119 E. 11 St. **$71,278.** Est. $61,440. M. C. Shibley, consult. engr.

Pa., Titusville—G. Becker, city clk., City Bldg., paving Park Ave. extending from N. Perry St. in Oil Creek Twp., near here, to Keystone Const. Co., Meade St., Meadville. Est. **$57,000.** J. M. Fay, city engr.

S. C., Columbia—F. Marshall, mayor, City Hall, removing abandoned street car rails incl. repaving sects. streets (only rail trenches). **WPA.** Est. about **$100,000.**

†**Texas**—U. S. Eng., Fort Sam Houston, asphalt paving, to R. W. Briggs & Co. and M. B. Killian, Sunset Rd., San Antonio. **$58,000.**

Tex., Houston—C. A. Pickett, mayor, bituminous street topping, force account. **$31,210.**

Tex., Refugio — Refugio Co., c/o judge, earthwork, drainage, flexible base, asphalt surfacing 8.132 mi. Dist. 6, to Heldenfels Bros., Rockport. Approx. **$172,000.** Bids 4/24. P. Young, Refugio, co. engr.

†**Alaska**—Pub. Roads Admin., 515-14 St. N.W., Wash., D. C., 70 mi. New Alaska Hy., to E. W. Elliott & Co., Dexter Horton Bldg., Seattle, Wash.

Que., Iberville—Municipality, J. R. Courtemanche, clk., asphalt paving 4 mi. road, to P. Baillargeon, 7 Champlain St., St. Jean. Est. **$25,000.** Bids 6/8. CD 6/2—ENR 6/4.

EARTHWORK, WATERWAYS

PROPOSED WORK

†**Nebraska**—Platt Valley PP and Irr. Dist., North Platte, diversion dam and canal from South Platte River to Sutherland reservoir. $250,000. **FWA.**

New Jersey—Palisades Interstate Park Comn., 80 Center St., New York, N. Y., reconstructing sea docks with piles, decking, guard rail, etc., Palisade Park, Bergen Co. $30,587. WPA. C. Malstrom, Orange and N. 6 Sts., Newark, WPA engr.

BIDS ASKED

Bids Asked June 30

†**Kentucky**—Tennessee Valley Auth., Knoxville, Tenn., levees, spillways for Camden Dewatering Project; levees, spillways, drainage ditches for Duck River Dewatering Project, Kentucky Project. C. H. Garity, dir. Purchases.

Bids Asked July 1

Louisiana — Bd. Comrs. Red River-Bayou Pierre Levee & Drainage Dist., Armisted, constructing Polly Lake Drainage Canal earthwork approx 2,750 cu. yd.; Shingle Bayou Canal, 12,690 cu.yd., length clearing 2.56 mi., for Dpt. P. Wks., Baton Rouge. C. E. Miller, Belzoni, engr. CD 5/7—ENR 5/14.

Bids Asked July 3

Miss., Belzoni—Belzoni D.D., Belzoni, 250,000 cu.yd. drainage, C. E. Miller, Belzoni, engr.

Bids Asked

Me., Bath—Bath Iron Works Corp., 4 Union St. (selected bidders) dredging 20,000 cu.yd. also removing 2,300 cu.yd. ledge rock.

LOW BIDDERS

†**Calif., Los Angeles**—U. S. Eng., 751 S. Figueroa St., June 13, Los Angeles River Channel imprv., North Bway. to Cardinal St., Inv. 423, from United Concrete Pipe Co., P. O. Box 1, Sta. H, **$338,220.** CD 5/11—ENR 5/14.

†**Mississippi**—U. S. Eng., P. O. Box 60, Vicksburg, May 26, earthwork on east bank Mississippi River, 720,000 cu. yd., from Edward E. Morgan Co., Jackson, **$242,028;** 642,000 cu. yd., from J. W. Hendrix, Coml. Natl. Bank Bldg., Shreveport, La., **$243,639.** CD 5/11—ENR 5/14.

Ont., St. Catharines—Ont. Hydro-Electric Power Co., 620 University Ave., Toronto, earth and rock excav. channels, intake structure, road, from Sterling Const. Co., Ltd., 2492 Sandwich St., W., Windsor, Ont.

EARTH WORK, etc. (Cont'd.)

CONTRACTS AWARDED

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, quay walls, exten. pier, to Macco Constr. Co. and Case Constr. Co., 815 Paramount Blvd., Clearwater. Bids 6/17.

★**†Massachusetts**—U. S. Eng., 31 St. James Ave., Boston, Mass., grading, filling, to M. De Matteo Constr. Co., 71 Blue Hills Pkway, Milton. Est. **$2,000,000-$3,000,000.** Bids 6/17.

†New Jersey—Ordnance Dept., Raritan Arsenal, Raritan, 361,200 ft. drainage ditches, clearing, grubbing, etc., **WPA. $180,600.** J. H. Weitzen, Chestnut and Hamilton Aves., Trenton, WPA engr. CD 6/4—ENR 6/11.

†Texas—U. S. Eng., Federal Bldg., Galveston, repairing dike, Inv. 359-42-580, to G. Mora, 312 Sabine St., Houston, **$33,370.**

Tex., Wharton — Wharton Co., Wharton, imprvs. drainage for flood control along Mustang Creek, **WPA. $53,545.**

†West Virginia—U. S. Eng., Federal Bldg., Pittsburgh, Pa., dredging 62,560 cu.yd., to Dravo Corp., Neville Island, Pittsburgh, Pa.

W. Va., Point Pleasant—Marietta Mfg. Co., Point Pleasant, dredging 250,000 cu.yd. material from bed Ohio River and Old Town Creek, near here, to Monongahela & Ohio Dredging Co., Oliver Bldg., Pittsburgh, Pa. CD 4/21—ENR 4/23.

UNCLASSIFIED

PROPOSED WORK

★**†Alabama**—IMPROVEMENTS—U. S. Eng., 306 Courthouse, Nashville, Tenn., plans by E. B. Van Keuren & J. W. Goodwin, archts. and engrs., Martin Bldg., Birmingham, imprvs. Over $3,000,000. CD 5/20—ENR 5/28.

†Arkansas—IMPROVEMENTS—U. S. Eng., 300 Bway., Little Rock, site surveys imprvs.

★**†California**—IMPROVEMENTS—U. S. Eng., 74 New Montgomery St., San Francisco, plans by Earl C. Thomas & Associates, archts. and engrs., 2273 Waverley Pl., Palo Alto, imprvs., military housing. Under $1,000,000.

Indiana — RURAL ELECTRIC LINES — Dubois Rural Electric Co-operative, Inc., L. B. White, supt., Jasper, completing section rural electric lines, Dubois Co. $40,000. REA allot.

Kansas—RURAL ELECTRIC LINES—D. S. & O. Rural Electric Cooperative Assn., Inc., F. B. Atkins, supt., Solomon, 106 mi. rural electric lines, Dickinson Co. $110,000 REA allot.

Kentucky and **Tennessee**—GAS LINE—Kentucky-Tennessee Natural Gas Corp., Louisville, Ky., gas line from Knox Co. to Knoxville, Tenn. Over $25,000.

Mississippi—RURAL ELECTRIC LINES—East Mississippi Electric Power Assn., H. W. Foote, supt., Meridian, completing section rural electric sys., Clarke and Lauderdale Counties. $40,000 REA allot.

★**†New Mexico**—IMPROVEMENTS—U. S. Eng., Albuquerque, imprvs.; bldgs. $4,500,000.

†New Mexico — IMPROVEMENTS — U. S. Eng., Albuquerque, N. M., bids soon, imprvs., bldgs. $300,000.

★**†New Mexico**—IMPROVEMENTS—U. S. Eng., Albuquerque, bids soon, imprvs., bldgs. $1,200,000.

★**North Carolina**—RURAL ELECTRIC LINE—French Broad Electric Membership Corp., Marshall, building and acquiring 499 mi. rural electric lines, Madison, Avery, Buncombe, Yancey and Mitchell Counties. $750,000 REA allot.

†North Dakota—IMPROVEMENTS—U. S. Eng., 1217 U. S. Post Office & Customhouse, St. Paul, Minn., rejected bids June 4, improvements. CD 6/16—ENR 6/18.

★**†Oklahoma** — IMPROVEMENTS — U. S. Eng., Citizens Bank Bldg., Denison, Tex., imprvs., bldgs., $7,000,000; clearing, grubbing, grading, drainage, etc., $100,000.

†Texas—IMPROVEMENTS—U. S. Eng., Citizens Bank Bldg., Denison, bids soon imprvs., roads, streets, asphalt paving area, $80,000; drainage facilities, $70,000.

†Texas—IMPROVEMENTS—U. S. Eng., Fort Sam Houston, bids soon imprvs., gas, water lines, etc. Spec. 42-114.

★**†Texas** — IMPROVEMENTS — Brownsville Ship Building Corp., S. F. Ewing, mgr., Brownsville, expansions and imprvs. Federally financed.

Texas — IMPROVEMENTS — Houston Shipbuilding Corp., Esperson Bldg., Houston, bids soon, imprvs., bldg. Over $40,000.

†Texas — IMPROVEMENTS — U. S. Eng., Citizens Bank Bldg., Denison, imprvs., bldgs. $150,000.

†Texas—IMPROVEMENTS—U. S. Eng., Albuquerque, N. M., bids soon, imprvs. bldgs. $175,000.

†Texas—NATURAL GAS LINES, etc.—U. S. Eng., Albuquerque, N. M., bids soon, natural gas lines, facilities, over $25,000; sanitary sewer lines, facilities, over $25,000; water distr. lines, facilities, over $15,000.

†Texas—UTILITY SYSTEM—U. S. Eng., Albuquerque, N. M., bids soon, utility sys. $225,000.

Tex., Dallas—DISTRIBUTING SYSTEM, etc. Dallas Light & Power Co., Dallas Power & Light Bldg., imprvs., exten. distr. sys. and plant. $95,000.

†Tex., Fort Worth—AIRPORT WORK—Civil Aeronautics Auth., Box 1689, new bids soon, airport work, clearing, grubbing, grading, drainage, drilling water wells, field and area lighting sys., etc. Proj. 442-3463. $150,000. No bids received June 8.

Virginia — RURAL ELECTRIC LINES — Powell Valley Electric Cooperative, Jonesville, completing section rural electric lines, Lee Co. $26,000 REA allot.

West Virginia—RURAL ELECTRIC LINES—Harrison Rural Electrification Assn., Inc., E. M. Johnston, supt., 917½ W. Pike St., Clarksburg, completing section rural electric lines, Harrison Co. $30,000 REA allot.

Wis., La Crosse—AIRPORT—City, airport north end French Island, on Mississippi River. $450,000.

Alaska — RURAL ELECTRIC LINES — Matanuska Electric Assn., Inc., C. Waldemar Mau, supt., Palmer, completing section rural electric lines, Matanuska Co. $26,000 REA allot.

BIDS ASKED

Bids Asked June 29

†Connecticut—PILING—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I. (from selected bidders), piling. Over $25,000.

†Maryland—IMPROVEMENTS—U. S. Eng., 6 and Walnut Sts., Phila., Pa., imprvs., paving.

Bids Asked June 30

†Arkansas—IMPROVEMENTS—U. S. Eng., 300 Bway., Little Rock, imprvs., grading, drainage, etc., Inv. 77-42-132.

N. Y., North Beach—TERMINAL—Comr. Docks, Pier A, foot of Battery Pl., North River, New York, Contr. 2365, 1 story exten. and altering Marine Terminal Bldg., at New York Municipal Airport, LaGuardia Field.

Bids Asked July 2

†New York—IMPROVEMENTS—U. S. Eng., 120 Wall St., New York, improvements.

Bids Asked July 3

N. B., Courtney Bay—WHARF—Secretary Dpt. Munitions and Supply, Ottawa, Ont., wharf and dredging. About $100,000.

Bids Asked July 7

†Georgia — MOORING DOLPHINS — Pub. Wks. Officer, U. S. Navy Yard, S. C., mooring dolphins, Spec. 10924.

Bids Asked July 9

N. Y., Brooklyn—TOPSOILING, etc.—New York Housing Auth., 122 E. 42 St., New York, top soil and planting for Fort Greene Houses, Proj. NY S-1.

Bids Asked July 1½

N. Y., New York—PUMPING EQUIPMENT—At office Executive Dir., Port of New York Auth., 111 8 Ave., Contr. MHT-64, Lincoln Tunnel, North Tube, pump. equip.; adv. ENR 6/25.

Bids Asked

†Florida—IMPROVEMENTS—U. S. Eng., Courthouse, Jacksonville, imprvs.

†Louisiana—IMPROVEMENTS—U. S. Eng., Postoffice and Courthouse, Vicksburg, Miss., imprvs.

†Missouri — IMPROVEMENTS — U. S. Eng., Courthouse and Customhouse, St. Louis, imprvs. access roads, parking area, etc.

†Texas — IMPROVEMENTS — Civil Aeronautics Auth., Box 1689 Fort Worth, imprvs., bldgs., $200,000; 232,000 sq. yd. grading, drainage sys., facilities; water distr. lines, facilities, over $15,000; sanitary sewers, over $25,000.

★**†Texas and Illinois** — PIPELINE CARRIER—Cities Service Oil Co., 70 Pine St., New York, N. Y., Atlantic Refinery, Sun Oil Co., Standard Oil Companies of New York and New Jersey, The Texas Co., Tide Water Co., et al, laying 24 in. main pipeline carrier between Longview, Tex. and Salem, Ill. or Mt. Vernon, Ind. $28,000,000. RFC will finance. CD 6/16—ENR 6/18.

†Washington—CLEARING, etc.—U. S. Eng., 800-3 Ave., Seattle, clearing, utilities, paving, etc.

LOW BIDDERS

†California—IMPROVEMENTS—U. S. Eng., Wright Bldg., Sacramento, June 16, imprvs., from Piazza & Huntley, 195 N. 6 St., San Jose, and M. J. Ruddy, Rt. 1, Box 1255, Modesto, **$188,220.** CD 6/15. ENR 6/18.

†California — IMPROVEMENTS — Industrial Company, bldg., from Carl Overaa & Co., 2105 Roosevelt Ave., Richmond. Federally financed. CD 6/8—ENR 6/11.

★**†New York** — IMPROVEMENTS — U. S. Eng., 120 Wall St., New York, June 15, imprvs., from Lane Constr. Co., 25 Colony St., Meriden, Conn., Item 1, **$274,426*****from Plattsburgh Stone Products Co., Plattsburg, Item 2, Alt. A, **$168,468;** Item 3, Alt. B, **$17[illegible] 603;** Item 4, Alt. C, **$252,690;** Item 5, total Items 1 and 2, **$523,214;** Item 6, total Items 1 and 3, **$532,349*****from Collins Bros. Co., Petersburg, Item 7, total Items 1 and **$599,383.** CD 5/28—ENR 6/4.

★**†New York**—IMPROVEMENTS—U. S. Eng., New York Dist., 120 Wall St., New York, June 16, imprvs., from Seaboard Constr. Corp., 19 Kisco Ave., Mt. Kisco, **$1,799,560** using asphalt, or **$1,899,965** using concrete. CD 6/[illegible] —ENR 6/4.

†North Carolina—IMPROVEMENTS—U. S. Eng., Maxton, June 15, imprvs., from V. Loftis Co., Builders Bldg., Charlotte.

†North Carolina—IMPROVEMENTS—U. S. Eng., Charlotte, June 18, imprvs., from B. F. Martin, Easley.

†North Carolina—IMPROVEMENTS—U. S. Eng., Maxton, June 15 imprvs., grading, from W. C. Shepherd, 2450 Briarcliff Rd. N.E., Atlanta, Ga.

†Rhode Island—GRADING, etc.—Newport Housing Auth., 1 Park Holm, Newport, June 16, imprvs., grading, drainage sys., landscaping, etc., RI 37013, for NHA, from Larcourt, Inc., 1216 Industrial Trust Bldg., Providence, Items **(1) $27,237; (2) $27,642; (3) $29,141.** CD 6/9—ENR 6/11.

†South Carolina—IMPROVEMENTS—U. S. Eng., Sumter, June 17, imprvs., paving, from Ballenger Paving Co., Greenville.

CONTRACTS AWARDED

★**†Arizona**—IMPROVEMENTS—U. S. Eng., 751 S. Figueroa St., Los Angeles, Calif., imprvs., to Pierson & Dickerson Contractors, Inc., Oswald Bros. & J. A. Casson Co., 204 Homebuilders Bldg., Phoenix. Awarded 6/3.

†Arizona—RAILROAD SPUR—U. S. Eng., 751 S. Figueroa St., Los Angeles, railroad spur, to J. C. Kelton, 4525 N. 7 St., Phoenix.

★**†Arkansas**—IMPROVEMENTS—U. S. Eng., 300 Bway., Little Rock, imprvs., to Gregory & Hogan, Insurance Bldg., Little Rock, **$1,037,930.** Awarded 6/8. Koch & Fowler, 600 S. Akard St., Dallas, Tex., and Horner & Shifrin, Shell Bldg., St. Louis, Mo., engrs. CD 5/29—ENR 6/4.

†Arkansas—IMPROVEMENTS—U. S. Eng., 300 Bway., Little Rock, imprvs., to M. E. Gillioz & Co., Monette, Mo. Awarded 6/6.

†Arkansas—IMPROVEMENTS—U. S. Eng., Gay Bldg., Little Rock, imprvs., bldgs., to Forcum-James Co., Dyersburg, Tenn. Awarded 6/18.

†Arkansas—IMPROVEMENTS—U. S. Eng., 300 Bway, Little Rock, imprvs., to Forcum-Jones Co., Dyersburg, Tenn. Awarded 6/18.

†California—IMPROVEMENTS—U. S. Eng., 751 S. Figueroa St., Los Angeles, imprvs., No. 529, to Griffith Co., 502 Los Angeles Railway Bldg., Los Angeles. Bids 6/13.

†California—IMPROVEMENTS—U. S. Eng., 751 S. Figueroa St., Los Angeles, imprvs., No. 531, to Donaldson-Long Co., & J. W. Van Frank, 130 W. Garvey Ave., Monterey Park. Est. over $25,000. Bids 6/9, awarded 6/19.

★**†California**—POWER LINES—U. S. Eng., 74 New Montgomery St., San Francisco, power lines, to Pacific Gas & Electric Co., 445 Sutter St., San Francisco, under **$1,000,000.** Awarded 6/18.

★**†Colorado**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, Neb., imprvs., bldgs., water, sewer, drainage system, roads, etc., Inv. 1728-42-6, to Kirchhof Constr. Co., 700 Lawrence St., Denver, Colo. **$3,000,000,** cost plus fixed fee basis. Bids 6/5, awarded 6/12. Crocker & Ryan, Colorado Springs, archts. and engrs. CD 4/24—ENR 4/30.

†Colorado — ELECTRIC SYSTEM — U. S. Eng., c/o Postmaster, Denver, electrical constr., to Palmquist Electric Co., 420 N. Main St., Helena, Mont.

★**†Colorado**—STEAM DISTRIBUTION SYSTEMU. S. Eng., c/o Postmaster, Denver, steam distr. sys., power plant, to Woehler & Force, Greeley, Colo. Davis & Wilson, Lowry Field, Denver, archts. and engrs. CD 6/16—ENR 6/18.

†Connecticut — SITE IMPROVEMENTS — Pub. Housing Auth., NHA, 24 School St., Boston, Mass., site imprvs., sewer, water, electric lines, community house, Conn. 6121, to R. H. Cone Co., 350 New Park Ave., Hartford, **$77,924,** Proposal 2. Bids 6/9. CD 5/29—ENR 6/4, under Public Bldgs.

†D. C., Wash.—LOADING PLATFORM—Pub. Bldgs. Admin., Interior Bldg., loading platform exten., to Bahen & Wright, Inc., 910 Rhode Island Ave. N.E., **$83,000.**

★**†Florida**—IMPROVEMENTS—U. S. Eng., Courthouse & Postoffice, Jacksonville, imprvs., to Johnson & Mann, Walgreen Bldg., St. Petersburg, under **$1,000,000.**

★**†Florida**—IMPROVEMENTS—U. S. Eng., Courthouse & Postoffice, Jacksonville, imprvs., to J. R. Ross, Ft. Meyers, under **$1,000,000.**

UNCLASSIFIED (Contracts Awarded, Cont'd.)

★†**Florida**—IMPROVEMENTS—U. S. Eng., Courthouse & Postoffice, Jacksonville, imprvs., to Simpson Constr. Co., Macclenny. Est. over **$3,000,000.** Reynolds, Brewton, Smith & Hill, Lynch Bldg., Jacksonville, archts. and engrs. CD 5/18—ENR 5/21.

†**Fla., Ft. Pierce**—IMPROVEMENTS—City, imprvs., to Margold Electric Co., 110 E. 23 St., New York, N. Y.; lighting sys., to C. E. Watkins, Ft. Pierce. CAA. Awarded 6/10.

★†**Kansas**—IMPROVEMENTS — U. S. Eng., 10 E. 17 St., Kansas City, Mo., imprvs., bldgs., to Lehr Constr. Co., 2110 Frederick St., St. Joseph, Mo. Est. less than **$1,000,000.**

★†**Kansas**—IMPROVEMENTS—U. S. Eng., 416 Wright Bldg., Tulsa, Okla., imprvs., bldgs., to Price Constr. Co., 505½ W. Main St., Oklahoma City, Okla., and to Ellis, Nicholson & Cramer, Hightower Bldg., Oklahoma City, Okla. Total est. approx. **$3,000,000.** CD 6/4—ENR 6/4.

Kan., Wichita — AIRPORT BUILDING — General contract admin. bldg., municipal airport, to Frank E. Blaser Constr. Co., 430 N. Rock Island St., **$37,763.** Total est. $40,000. G. H. Thomas, 125½ N. Topeka St., archt.

†**Massachusetts** — IMPROVEMENTS — Industrial Co., imprvs., bldg., to Charles Logue Bldg. Co., 331 Newbury St., Boston, **$265,512** ***plant and bldg., to R. R. Jacobucci, Inc., 28 Dayton St., Quincy, **$126,215** and est. **$75,-000** respectively. Grand total $466,727. Bids 6/8.

★†**Mississippi** — IMPROVEMENTS — U. S. Eng., Courthouse, Mobile, Ala., imprvs., to J. A. Jones Constr. Co., 209 W. 4 St., Charlotte, N. C., over **$3,000,000.**

†**Mississippi**—IMPROVEMENTS—U. S. Eng., Courthouse, Mobile, Ala., imprvs., grading, etc., Inv. 569-42-733, to Cobb Bros. Constr. Co., Meridian. Awarded 6/15.

†**Missouri**—IMPROVEMENTS—U. S. Eng., 10 E. 17 St., Kansas City, Mo., imprvs., sewers, paving, to W. L. Johnson, Lockwood, O.

Neb., Nebraska City—SWIMMING POOL—Ethel Gaskill, city clk., completing municipal swimming pool, own forces. **$30,000.**

★†**Nevada** — IMPROVEMENTS — U. S. Eng., Wright Bldg., Sacramento, Calif., imprvs., to Isbell Constr. Co., 1300 E. 4 St., Reno, **$550,-407.** Est. $657,383. Bids 5/30. CD 6/5—ENR 6/11.

†**Nevada**—IMPROVEMENTS—U. S. Eng., Wright Bldg., Sacramento, Calif., imprvs., sewage disposal plant, Inv. 62, to Central California Constr. Co., Hind Bldg., 230 California St., San Francisco, Calif. **$141,395.** CD 6/18, under LB. ENR 6/11.

†**New Jersey**—IMPROVEMENTS—U. S. Eng., 120 Wall St., New York, N. Y., imprvs. facilities and grounds military establishment, **WPA. $250,000.** CD 6/3—ENR 6/11.

N. J., Perth Amboy — RECREATION GROUNDS—City, City Hall, developing recreational grounds, incl. sport facilities, courts, wading pools, picnic areas, etc., **WPA. $104,000.** CD 6/4—ENR 6/11.

★†**New Mexico** — ELECTRICAL SUPPLY SYSTEM, etc.—U. S. Eng., Albuquerque, electrical supply, distr. sys., to Bauman Electric & Neon Signs, 1800 Texas St., El Paso, Tex. Under **$1,000,000.** Awarded 6/13. CD 6/2.

†**Pennsylvania** — IMPROVEMENTS — Industrial Company, imprvs., bldg., to Frank V. Warren Co., Inc., 15 Locust St., over **$150,000.** Federally financed.

★†**South Carolina**—SITE IMPROVEMENTS Pub. Housing Auth., NHA, North Interior Bldg., Wash., D. C., site imprvs. for demountable housing, to Green Lumber, Laurel, Miss. Awarded 6/21. CD 6/12—ENR 6/18, under LB.

★†**South Dakota**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, Neb., imprvs., bldg., to Hurley & Sauers, 1001 Oakdale Ave., St. Paul, Minn., **$358,000*** addnl. bldgs., to Sioux Syndicate Constr Co., Sioux Falls, **$680,000.**

†**Tennessee**—IMPROVEMENTS—U. S. Eng., 306 U. S. Courthouse, Nashville, imprvs., bldgs., to Gardner Constr. Co., 135 4 Ave. N., Nashville.

★†**Texas and Illinois** — PIPELINE — Cities Service Oil Co., 70 Pine St., New York, N. Y., Atlantic Refinery, Sun Oil Co., Standard Oil Companies of New York and New Jersey, The Texas Co., Tide Water Co., et al, furnishing 550 mi. 24 in. steel tubing for pipeline between Longview, Tex. and Salem, Ill. or Mt. Vernon, Ind., to National Tube Co., Frick Bldg., Pittsburgh, Pa., approx. **$7,500,000.** RFC will finance. CD 6/16—ENR 6/18.

†**Texas**—ELECTRIC DISTRIBUTION SYSTEM—U. S. Eng., Masonic Bldg., Amarillo, electric distr. sys., street and area lighting, Inv. 257-42-198, to Richards & Mullinix, 1401 N.W. 5 St., Oklahoma City, Okla. **$34,000.**

†**Texas**—FUEL LOADING SYSTEM—U. S. Eng., Fort Sam Houston, gasoline and fuel loading sys., facilities, Spec. 42-101, to Aqua Systems, Inc., 701 E. 3 St., Los Angeles, Calif., approx. **$36,000.** CD 6/4—ENR 6/11.

†**Texas**—IMPROVEMENTS—Civil Aeronautics Auth., Box 1689, Fort Worth, imprvs., street and area overhead lighting sys., to A. J. Conner, Roanoke, Va., approx. **$28,200.**

†**Texas**—IMPROVEMENTS—U. S. Eng., Federal Bldg., Galveston, to Briggs-Bellows, General Delivery, Eagle Pass, imprvs., installing waterworks sys., **$80,000,** est. $75,000; sanitary sewerage sys., **$158,000;** est. $100,000, or more; natural gas distr. sys., facilities, **$55,000,** est. $60,000, all foregoing Spec. 359-42-585. Grand total $329,000.

†**Texas**—IMPROVEMENTS—U. S. Eng., Federal Bldg., Galveston, to Thos. Bate & Son, 1127 Girard St., Houston and J. J. Fritch, Construction Bldg., Dallas, imprvs., installing sewer lines, facilities, **$110,000;** natural gas distr. sys., facilities, **$68,000;** water distr. lines, **$79,000.** Grand total, $257,000.

†**Texas**—IMPROVEMENTS—U. S. Eng., Federal Bldg., Galveston, imprvs., to Brown & Root, Inc., 412 Fannin St., Austin, **$288,000.** Est. $300,000. CD 6/11—ENR 6/18.

†**Texas**—IMPROVEMENTS—City and Kerr Co., imprvs., waterlines, facilities, Inv. W2161-42-385, and addnl. sanitary sewers, facilities, Inv. W2161-42-538, to Brown & Root, Inc., 412 Fannin St., Austin, **$28,000** and **$46,000** respectively. **FWA.**

†**Texas**—IMPROVEMENTS—U. S. Eng., Federal Bldg., Galveston, imprvs., to Ballentyne Engineering Co., Mission, **$110,000.**

†**Texas**—IMPROVEMENTS—U. S. Eng., 416 Wright Bldg., Tulsa, Okla., imprvs., roads, streets, and area asphalt paving, to Texas Bitulithic Co., Box 5297, Dallas, approx. **$122,000.**

†**Texas**—IMPROVEMENTS—U. S. Eng., Fort Sam Houston, imprvs., bldg., etc., to Bumbaugh, Cunningham & Dinn, North St. Marys St., San Antonio, **$86,000*** roads, concrete sidewalks, grading field, to J. and D. McNeel, Builders Exchange, San Antonio, **$68,000*** aerial distr. (electric) sys., to Graham & Collins, Main Ave., San Antonio, **$26,400*** installing sewers and water distr. lines, facilities, to Truehart, Caldwell & Lee, Builders Exchange Bldg., San Antonio, **$46,000** and **$23,600** respectively. Grand total $250,-000. CD 6/8—ENR 6/11.

†**Texas**—RAILWAY TRACKS—U. S. Eng., 12 and Washington Sts., Waco, railway tracks, to Martin & Grace, 4954 Cass St., Dallas, and W. Smith, Waco. Approx. **$72,000.**

Tex., Dallas—POWER TRANSMISSION LINE—Dallas Power & Light, Dallas Power & Light Bldg., installing 3.1 mi. electric overhead power transmission line (to Standard Brands Inc. plant), force account. **$25,000.**

Tex., Houston—REMOVING STREET CAR RAILS—City, removing approx. 69 mi. street car rails, paving removal trenches with asphalt and concrete, force account. **$200,000.**

★†**Wyoming**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, Neb., imprvs., water and sewer lines, to Morrison-Knudsen Co., Inc., 319 Bway., Boise, Idaho. Est. entire project over **$5,000,000.**

★†**Outside United States**—IMPROVEMENTS —Yards & Docks, Navy Dpt., 18 and Constitution Ave. N.W., Wash., D.C. Supplementary Agreement 2, imprvs., Noy 4631, to George A. Fuller Co. & Merritt Chapman & Scott, 597 Madison Ave., New York, **$1,924,642.** Additional to CD 2/17—ENR 2/20, under CA.

★†**Outside United States**—IMPROVEMENTS —War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., imprvs., to Cayuga Constr. Corp., 217 Bway., New York, N. Y. est. **$8,000,000.**

★**Ont., Pendelton**—IMPROVEMENTS—Dpt. Natl. Defense for Air, imprvs., bldg., to Ontario Constr. Co., Ltd., 31 Queen St., St. Catherines, about **$500,000.**

LATIN AMERICA

Mexico — Altos Hornos de Mexico, plans steel factory, Monclova, Coahuila. $10,600,000.

PUBLIC BUILDINGS

PROPOSED WORK

★†**Alabama**—U. S. Eng., 494 Spring St. N.W., Atlanta, Ga., military housing. Over $3,000,000.

★†**California**—Housing Auth. of City of Vallejo, Vallejo, plans by Albert F. Roller, Crocker 1st Natl. Bank Bldg., San Francisco, housing.

★†**California**—Housing Auth. of Marin Co., G. Ciocca, exec. dir., Cheda Bldg., San Rafael, plans by Blanchard, Maher & Ward, 369 Pine St., San Francisco, housing, plans by C. F. Gromme, Albert Bldg., San Rafael, and C. T. Kett, 508 Throckmorton Ave., Mill Valley, housing, for NHA. $10,000,000.

★†**California**—Richmond Housing Auth., 271 10 St., Richmond, sketches by C. J. Warnecke, Financial Center Bldg., Oakland, housing, for NHA.

★†**Colorado**—U. S. Eng., Albuquerque, N. M., bldg. Over $3,000,000. Wilson & Co., Salina, Kan., archts. and engrs.

†**Connecticut**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., rejected bids June 12, housing, Conn. 6017. CD 6/16—ENR 6/18, under LB.

★†**Connecticut**—Pub. Housing Auth., NHA, 16 Armistice St., New Britain, rejected bids housing, Conn. 6033. $1,200,000. CD 5/14—ENR 5/21, under LB.

†**Delaware**—Pub. Housing Auth., Temp. Bldg. 2, 19 and D Sts. N.W., Wash., D. C., plans by G. Morris Whiteside, Du Pont Bldg., Wilmington, housing.

†**D. C., Wash.**—Federal Security Admin., 4 St. and Independence Ave. S.W., rejected bids May 19, storeroom, warehouse, laundry and shops bldg., for St. Elizabeth's Hospital. CD 5/20—ENR 5/28, under LB.

†**Ga., Albany**—Dougherty Co. Bd. Com., Albany, plans by W. J. J. Chase, 140 Peachtree St. N.E., Atlanta, health center, Docket 9-169. $35,000. **FWA.**

†**Ga., Brunswick**—City, bids in about 30 days, nurses' home, adjoining City hospital. $90,000. **FWA.**

†**Indiana**—Perfect Circle Co., Hagarstown, foundry addn. $40,000. Federally financed.

★†**Indiana**—U. S. Eng., 612 Federal Bldg., Louisville, Ky., plant. Over $3,000,000. Ford, Bacon & Davis, Inc., 150 Bway., New York, N. Y., archts. and engrs.

†**Kansas**—U. S. Eng., Albuquerque, N. M., bids soon, bldgs.

★†**Kansas**—U. S. Eng., 601 Davidson Bldg., Kansas City, Mo., plans by Wyatt C. Hedrick, archt. and engr., 1st Natl. Bank Bldg., Ft. Worth, Tex., military housing, facilities. $23,000,000.

†**La., Minden**—F. D. Culbertson, mayor, health center, La. 16-219. $22,565. **FWA.** J. M. Feurney, Hammond, engr.

†**Md., Aberdeen**—Con. Q.M., Aberdeen, post office.

★†**Missouri**—U. S. Eng., Courthouse & Customhouse, St. Louis, plant. Over $3,000,-000. Mauran, Russell, Crowell & Mullgardt, 721 Olive St., St. Louis, and Giffels & Vallet, Inc., 1000 Marquette Bldg., Detroit, archts. and engrs.

★†**New Mexico**—U. S. Eng., Albuquerque, bldg., etc. Over $1,000,000.

★†**New Mexico**—U. S. Eng., Albuquerque, bldg. $2,200,000.

†**New York** — Industrial Company, plant addn. Defense Plant Corp. will finance.

★†**New York** — Curtiss-Wright Corp., 30 Rockefeller Plaza, New York, buildings. $10,000,000. Federally financed.

N. Y., Brooklyn—Bd. Educ., 110 Livingston St., plans by E. Kebbon, c/o owner, 3 story, 178x294 ft. school, 413-73 Madison Ave.

★†**Pennsylvania**—Public Housing Auth., NHA, 270 Bway., New York, N. Y., housing.

†**Pa., Corry**—Corry Hospital Assn., Corry, E. E. Hawkins, pres., revised plans and bids soon hospital addn. Docket Pa. 36-114. $55,000. **FWA.** T. Hendryx, 165 Interstate Parkway, Bradford, archt. CD 4/14—ENR 4/16.

★†**Texas**—Goodrich Tire & Rubber Co., 500 S. Main St., Akron, O., plant. $22,000,000. Defense Plant Corp. will aid in financing.

★†**Texas**—U. S. Eng., Fort Sam Houston, bids soon, converting military housing, $1,-000,000; sanitary and storm sewers, over $25,000; natural gas distr. lines, facilities, over $25,000; water lines, facilities, over $15,-000.

†**Texas**—U. S. Eng., Camp Wallace, bids soon, bldg., utilities, Inv. W2161-42-55. $60,-000.

Tex., Jacksonville — City, tomato experimental station, facilities. $40,000.

†**Tex., Victoria**—Bd. Educ., W. Offer, pres., revised plans by K. J. Leffland, Victoria, 58x209 ft., and 41x37 ft., mechanical vocational shop and school, Tex. 41-118. $150,000. **FWA.** CD 6/19—ENR 3/24.

BIDS ASKED

Bids Asked After June 23

★†**Georgia**—U. S. Eng., 494 Spring St., Atlanta, superstructure plant exten. Robert & Co., Rona Allen Bldg., Atlanta, engrs. CD 6/9—ENR 6/11, under CA.

★†**Texas**—Pub. Housing Auth., NHA, Electric Bldg., Fort Worth, housing, $400,000; roads, streets, paving over $25,000; water distr. sys., facilities, $35,000; sanitary sewerage sys., $50,000. Hedrick & Lindsley, 818 Southern Standard Bldg., Houston, archts. and engrs.

Bids Asked June 30

★†**Indiana**—Allied Architects, archts., 909 Archts. & Bldrs. Bldg., Indianapolis, housing, Ind. 12101, for Pub. Housing Auth., NHA, North Interior Bldg., Wash., D. C., $1,647,000. Extended date. CD 6/15—ENR 6/18.

★†**Maine** — Pub. Housing Auth., NHA, 24 School St., Boston, Mass., housing, ME. 17036. $800,000. Wadsworth & Boston, 57 Exchange St., Boston, Mass., archts.

Bids Asked July 1

N. Y., New York—Comr. Dpt. Mental Hygiene, State Office Bldg., Albany, power house facilities, heating work, Manhattan State Hospital, Wards Island. $35,000.

Bids Asked After July 1

†**Me., York**—Town, high school, Docket Me. 17-117. $55,000. **FWA.** CD 5/25—ENR 5/28.

Bids Asked July 2

N. Y., Hudson—Comr. Social Welfare, 112 State St., Albany, State Training School for Girls. Extended date. CD 5/20—ENR 5/28.

PUBLIC BLDGS. (Bids Asked, Cont'd.)

Bids Asked July 9

N. Y., Syracuse — Adjutant General, Div. Military & Naval Affairs, Executive Dpt., Capitol, Albany, addnl. work, field artillery armory, Spec. 11203. CD 5/20—ENR 5/28, under BA.

Bids Asked July 10

†New Jersey—Long Branch Housing Auth., City Hall, Long Branch, apartment bldgs., for NHA. $414,000. H. I. Braun, 191 Bway., archt. E. D. Powers, 20 Branford Pl., Newark, engr. CD 5/25—ENR 5/28, under BA.

Bids Asked July 21

†New Jersey—Asbury Park Housing Auth., C. G. Lumley, exec. dir., Asbury Park, Washington Village housing, Project NJ-7-2, for NHA. CD 1/13—ENR 1/15, under BA.

Bids Asked

†Connecticut — Industrial Company (from selected list bidders), factory unit. Over $40,000. Federally financed. Fletcher Thompson, Inc., 1336 Fairfield Ave., Bridgeport, engr.

†Florida—U. S. Eng., Courthouse, Jacksonville, bldgs.

†Maryland—Farm Security Admin., Upper Darby, Pa., bldgs.

★**†Texas**—Industrial Company, plant, $14,850,000; artificial lake, etc., $650,000. Defense Plant Corp. will finance.

†Texas—U. S. Eng., Fort Sam Houston, 1 story post office, Spec. 42-130. $60,000.

LOW BIDDERS

Colo., Leadville—Lake Co., Mar. 12, 2 story, bsmnt., rein.-con. courthouse, from Spiegelberg Lbr. & Const. Co., Green River, Wyo. $212,000. Est. $200,000. CD 2/19—ENR 2/26.

†Louisiana—U. S. Eng., foot of Prytania St., New Orleans, June 12, bldg., from J. M. King, 3535 Plank Rd., Baton Rouge.

†Louisiana—U. S. Eng., foot of Prytania St., New Orleans, bldg., from Lionel F. Favret, 937 Gravier St., New Orleans.

†Louisiana—U. S. Eng., foot of Prytania St., New Orleans, June 18, military housing, Inv. 1096-42572, from Gervais F. Favrot, Balter Bldg., New Orleans.

★**†Maine**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., June 18, housing, ME 17031, from N. Fish Constr. Co., Barnum Hotel, Bridgeport, Conn., $2,200,000. Est. $2,000,000. CD 6/4—ENR 5/28.

†Massachusetts—Pub. Housing Auth., NHA, 24 School St., Boston, June 19, housing, Mass 19053, from Harry Hershon Co., Inc., 1860 Bway., New York, N. Y., $331,610. Est. $300,000. CD 6/9—ENR 6/11.

★**†New York**—Pub. Housing Auth., NHA, 270 Bway., New York, June 16, from Duplex Constr. Co., Glens Falls, demountable housing, Proj. N.Y. 30101, $570,000; permanent dwellings, Proj. N.Y. 30102, $895,000; combination bid, $1,570,000. CD 6/11—ENR 5/28.

★**†New York**—Tonawanda Housing Auth., 33 S. Niagara St., Niagara, June 16, housing, Proj. N. Y. 9, and Colin Kelly Heights Housing, Project N.Y. 10, for NHA, from C. B. Ross Co., Inc., 2 Lafayette St., New York, $826,897 and $664,203 respectively. CD 6/12.

★**†New York**—U. S. Eng., Chimes Bldg., Syracuse, June 18, bldgs., etc. from J. W. Ryan Const. Co. Inc., 369 Lexington Ave., New York, $2,742,498, alt. A, $2,706,445. CD 6/12.

†North Carolina—U. S. Eng., Fort Bragg, June 18, bldg., Inv. 982-42-192, from P. S. West Constr. Co., Statesville.

†South Carolina—U. S. Eng., Fort Jackson, June 13, bldg., from M. B. Kahn Constr. Co., Columbia.

†Texas—U. S. Eng., Amarillo, June 1, bldgs., No. 257-42-223, from C. M. Suttle, 12 N.W. 8 St., Oklahoma City, Okla., approx. $268,000.

CONTRACTS AWARDED

★**†Alabama**—Mobile Housing Auth., demountable type housing, Project Ala. 1036, to Algernon Blair Constr. Co., 1st Natl. Bank Bldg., Montgomery, $3,825,000. CD 6/1—ENR 6/4.

★**†Alabama**—Mobile Housing Auth., Mobile, demountable type dwelling units, Ala 1102, to Peyton Higgison and Hancock Co., 59½ St. Francis St., Mobile. Est. $1,000,000. Bids 5/25. CD 6/1—ENR 6/4.

†Alabama—U. S. Eng., Bynum, 2 shops, to J. E. Dillard, 2901 N. 19 St., Bessemer. J. B. Converse & A. C. Polk Engrs., Protective Life Bldg., Birmingham, archts. Bids 6/15.

★**†Arizona** and **Nevada**—Bureau Reclamation, Customhouse, Denver, Colo., generators for Davis Power Plant, Spec. 1034, to General Electric Co., 650 17 St., Denver, Colo., $2,487,000. Bids 6/9, awarded 6/12. S. O. Harper, Customhouse, Denver, Colo., engr. CD 5/25—ENR 5/28.

★**†Arkansas**—U. S. Eng., Gay Bldg., Little Rock, housing, to Nelld-Sumbold and Nelld, Shreveport, La. Est. $3,000,000. Awarded 6/18. CD 6/10—ENR 6/18.

†Arkansas—U. S. Eng., Gay Bldg., 300 Bway., Little Rock, military housing, to George Senne Co., 510 E. 15 St., Topeka, Kan. Awarded 6/10. CD 3/31—ENR 4/2.

★**†California**—Housing Auth. of City of Los Angeles, 1031 S. Bway., Los Angeles, dormitory housing, Cal. 4302, for NHA, to E. C. Nesser Co., 4822 W. Jefferson Blvd., Los Angeles, approx. $1,500,000. CD 6/16—ENR 6/18.

★**†California**—Housing Auth. of City of Los Angeles, 1031 S. Bway., Los Angeles, housing, Project Cal. 4109, to Zoss Constr. Co., 1027 N. Cole Ave., Los Angeles, approx. $500,000. Additional to CD 5/14—ENR 5/21, under CA.

★**†California**—Housing Auth. of Marin Co., Cheda Bldg., San Rafael, dormitory units, for NHA, to Leo Epp, 4745 Geary St., San Francisco. CD 6/16—ENR 6/18.

★**†California**—Housing Auth. of Marin Co., Cheda Bldg., San Rafael, demountable dwelling and apartment, units, etc., for NHA, to Leibert & Trobock, C. W. Caletti, and Grant Leibert, Albert Bldg., San Rafael, over $1,000,000, cost plus basis. CD 6/16—ENR 6/18.

★**†California**—U. S. Eng., 74 New Montgomery St., San Francisco, bldg., bathing facilities, to William D. Rapp, 369 Pine St., San Francisco, under $1,000,000. Awarded 6/17.

Notice to Readers

Please do not write for additional information on individual jobs. It is not possible to answer such letters.

All the information that it is permissible to release is reported in these pages.

Business News Department

ENGINEERING NEWS-RECORD

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, bldgs., utilities, to J. J. Barnes Constr. Co., 1119 Montana St., Santa Monica. Est. over $150,000. Awarded 6/12.

★**†California**—Yards & Docks, Navy Dpt., 18 St. & Constitution Ave. N.W., Wash., D. C., Supplemental agreement, additional facilities, NOY 4412, to I. C. Curry & F. E. Younz, 1701 B St., San Diego, $2,552,580. Awarded 6/2.

★**†Colorado**—U. S. Eng., Lowry Field, Denver, bldg., walks, roads, parking areas, grading, etc., to Peter Kiewit & Sons, and J. B. Bertrand, 4295 York St., Denver, $2,050,983. Bids 5/29, awarded 6/11. Rocky Mt. Eng. Co., archt. and Ernest Porter, engr., both 212 McClintock Bldg., Denver. CD 5/13—ENR 5/22.

★**†Colorado**—U. S. Eng., 1709 Jackson St., Omaha, Neb., bldg., to Kirchhof Const. Co., 700 Lawrence St., Denver, $899,273. Meridith Musick, 1012 Patterson Bldg., Denver, archt. Bids 5/22. CD 4/23—ENR 4/30.

★**†Colorado**—U. S. Eng., c/o Postmaster, Denver, letters of intent to H. K. Ferguson Co., Hanna Bldg., Cleveland, O., for arch.-engr.-constr. services; with H. A. Kuljan & Co., 1518 Walnut St., Phila., Pa., for arch-engr. services; with Swinnerton & Walberg, 225 Bush St., San Francisco, Calif., and C. G. Kershaw Constr. Co., of Birmingham, Ala., for constr.-management services for mfg. plant. Over $3,000,000. CD 6/18 under Water Works, CA.

†Connecticut — U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., bldgs., to J. G. Roy & Sons Co., 21 Silver St., Springfield, Mass.

★**†Delaware**—Pub. Housing Auth., NHA, Temp. Bldg., 2, 19 and D Sts. N.W., Wash., D. C., permanent housing, Del. 7021, to Muhleman & Kayhoe, Inc., 505 E. Franklin St., Richmond, Va. $735,204. CD 6/4—ENR 6/11.

★**†Florida**—U. S. Eng., Courthouse, Jacksonville, bldgs., Inv. 436-42-neg., to W. A. Hart, 424 N.E. 6 Ave., Ft. Lauderdale, less than $1,000,000. Awarded 6/13.

★**†Florida**—U. S. Eng., Courthouse & Postoffice, Jacksonville, boiler house, steam distr. sys., to Moody Bros. Plumbing & Heating Co., Ft. Myers, under $1,000,000.

★**†Florida**—U. S. Eng., Courthouse, Jacksonville, pre-fabricated bldgs., Inv. 436-42-neg., to Sprague Const. Co., Sarasota, less than $1,000,000. Awarded 6/9.

★**†Florida**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., addnl. facilities, S.A. No. 2, NOY 5129, to Mackle Co. & Leach Constr. Co., 2818 Coral Way, Miami. $1,963,000. Additional to CD 4/27—ENR 6/4, under CA.

†Illinois—Industrial Co., plant, to Illinois Hydraulic Stone & Constr. Co., 20 North Crystall St., Elgin. Federally financed. Engineering Systems, Inc., 221 N. La Salle St., Chicago, archts.

★**†Iowa**—U. S. Eng., Clock Tower Bldg., Rock Island, Ill., altering bldgs for military housing, to O. L. Wiltsie, 3120 E. Shawnee St., Des Moines, $500,000. CD 6/11—ENR 6/11.

†Louisiana—U. S. Eng., foot of Prytania St., New Orleans, bldg., Inv. 1096-42-556, to R. P. Farnsworth & Co., Inc., 1515 S. Salcedo St., New Orleans. Awarded 6/12.

★**†Louisiana**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., addnl. facilities, Supplementary Agreement 1, NOY 5147, to W. Horace Williams Co., 833 Howard Ave., New Orleans. $2,950,000. Additional to CD 12/16, under CA.

★**†Minnesota**—U. S. Govt., Commodity Credit Corp., The mall between 12 and 14 Sts. S.W., Wash., D. C., 5,000 grain bins, to Hogenson & Kindem Constr. Co., 402 Corn Exchange, Minneapolis, $1,600,000. Awarded 6/10.

†Mississippi—U. S. Eng., Courthouse, Mobile, Ala., bldgs., Inv. 569-42-626 to Dye & Mullings, Columbia, Miss. Bids 6/11, awarded 6/17.

†Mississippi—U. S. Eng., Courthouse, Mobile, Ala., addnl. bldgs., Inv. 569-42-684, to Plowden & Roberts, Columbia, S. C. CD 6/18, under LB.

★**†Missouri**—U. S. Eng., 701 Davidson Bldg., Kansas City, Mo., hospital facilities, to Fogel Const. Co., Reliance Bldg., Kansas City, Mo. Est. over $1,000,000. CD 5/13.

★**†Missouri**—U. S. Eng., 10 E. 17 St., Kansas City, Mo., housing, to McCarthy Bros. Const. Co., 4903 Delmar St., St. Louis. Est. over $1,000,000.

†Missouri—U. S. Eng., 800 Courthouse & Customhouse, St. Louis, bldg. alterations, to Arthur R. Darr, 3805 Holly Hills Ave., St. Louis.

★**†Missouri**—U. S. Eng., 10 E. 17 St., Kansas City, general contract bldg., to J. E. Dunn Const. Co., Reliance Bldg., Kansas City, Mo. plumbing, to E. Lochman Plumbing Co., 1421 Cherry St., Kansas City, Mo.***wiring, to A. D. Jacobson Co., 331 Southwest Bldg., Kansas City, Mo.***excavation, to Bowen Constr. Co., 1914 Highland St., Kansas City. Est. over $1,000,000.

†New Jersey—Industrial Company, bldgs., to William L. Blanchard Co., 45 Pioneer St., Newark. $250,000. Federally financed. CD 6/9—ENR 6/11.

†New Jersey—Industrial Company, bldgs., to William L. Blanchard Co., 45 Pioneer St., Newark. $300,000. Federally financed. CD 4/2—ENR 4/9.

N. J., Bordentown—Bd. Educ., Bordentown, 2 story school, to G. H. Evans, 1126 Fairmount Ave., Phila., Pa. Est. over $150,000. CD 5/26—ENR 5/28.

★**†New York**—Pub. Housing Auth., NHA, 270 Bway., New York, housing, Project N.Y. 30082, to A. J. Paretta Contr. Co., Inc., 43-49 45 St., Long Island City, $1,374,430. Bids 5/26. CD 5/28—ENR 6/4.

★**†North Carolina**—U. S. Eng., Arcade Bldg., Asheville, bldgs., to Fowler-Jones Constr. Co., Barger Bros., and Herman Sipe, Winston-Salem. Total est. $3,000,000-$5,000,000. CD 6/16—ENR 6/18, under LB.

★**†Ohio** — Industrial Company, plant, to Hunkin-Conkey Constr. Co., 1740 E. 12 St., Cleveland. Est. $5,000,000. Awarded 6/19. Defense Plant Corp. will finance. CD 3/31—ENR 4/2.

†Ohio—Industrial Company, bldgs., to H. L. Vokes Co., 5300 Chester Ave., Cleveland. Est. $3,000,000. Defense Plant Corp. will finance. T. W. Lamb Associates, Inc., 36 W. 40 St., New York, N. Y., archts.

★**†Ohio**—U. S. Eng., 700 Union Guardian Bldg., Detroit, Mich., construction-management services, building, to Cooke Constr. Co., 2401 Barlum Tower, Detroit, Mich. Over $3,000,000. CD 6/12—ENR 6/18.

★**†Oregon** — Portland Housing Auth., 1st Natl. Bank Bldg., Portland, housing, for NHA, to Ross B. Hammond Co., Spalding Bldg., Portland. $4,000,000 cost plus fixed fee basis. A. E. Doyle & Associate, Jefferson St., Portland, archts. Awarded 6/16. CD 6/10—ENR 6/18.

★**†Oregon**—U. S. Eng., Pittock Blk., Portland, bldgs., platforms, Inv. 698-13, to Odegard & Associates, 2417 Hewitt St., Everett, Wash., L. H. Hoffman and W. C. Smith, 715 S.W. Columbia St., Portland, about $600,000; bldgs., appurtenant work, Inv. 698-8, to P. N. Odegard, 2417 Hewitt St., Everett, Wash., W. C. Smith and L. H. Hoffman, 715 S.W. Columbia St., Portland, and H. S. Wright, 407 Yale Ave., Seattle, Wash., $560,941. Bids 6/4. CD 6/10—ENR 6/18 under LB.

★**†Pennsylvania**—Johnstown Housing Auth., W. Burkhard, exec. dir., Johnstown, general contract apartment bldgs., Project Pa. 19-2, for NHA, to Lereiz Const. Co., 118-57 Montauk St., St. Albans, N. Y.***plumbing, to Rittenhouse Plumbing Co., 210 E. 40 St., New York, N. Y.***heating, to E. D. Turner, 31 Mamaroneck Ave., White Plains, N. Y.*** electrical work, to Moyer Bros., Beale Ave. and 26 St., Altoona, Pa. Total est. $500,000. CD 6/9—ENR 6/11, under LB.

★**†South Dakota**—U. S. Eng., Fort Peck, Mont., bldgs., to Rye & Henkel, Mason City, Ia.***bldgs., water supply and storage, to L. M. Feller Co., Rochester, Minn., and Graus Const. Co., Hastings, Minn.***bldgs., to Fuel Economy Eng. Co., 510 New York Bldg., St. Paul, Minn.***sanitary sewers and water distr. sys., to J. A. Shaw Const. Co., and Haggart Constr. Co., both Fargo, N. D.*** electric distr. sys., to Black Hills Power Co., Rapid City***heating sys., to F. S. Lamson Co., 926 Marquette St., Minneapolis, Minn. Est. over $5,000,000.

★**†Texas**—U. S. Eng., Citizens Bank Bldg., Denison, boilers, etc. for plant, to Erie City Iron Wks., 1422 East Ave., Erie, Pa., and A. M. Lockett & Co., Ltd., Magnolia Bldg., Dallas, approx. $1,600,000. Freese & Nichols, Capps Bldg., Fort Worth, archts. and engrs.

†Texas—U. S. Eng., Citizens Bank Bldg., Denison, bldgs., Inv. 257-42-203, to Lawless & Alford, Paris. $168,000.

†Texas—U. S. Eng., Fort Sam Houston, altering bldgs., (TI-9), Spec. 42-113, to Yarbrough & Reinhardt, 5 St. and Navasota Sts., Austin. Tentative award. Bids about 6/12. Awarded 6/16.

PUBLIC BLDGS. (Contracts Awarded, Cont'd.)

★**†Texas**—U. S. Eng., Fort Sam Houston, bldg. expansion Inv. W2161-42-82, to H. B. Kilstofte, Builders Exchange, San Antonio, approx. **$560,000.** Bids 6/10. CD 6/4—ENR 5/28.

†Tex., Rollo—Farm Security Admin., Dpt. Agriculture, Parry at Commerce Sts., Dallas, bldgs., sewer, water, electric distr. facilities, etc., to H. H. King, 417 W. Clay St., Houston. **$252,436.** CD 6/15—ENR 6/18.

★**†Utah**—U. S. Eng., 32 Exchange Pl., Salt Lake City, bldgs., to Ford J. Twaits Co., 816 W. 5 St., Los Angeles, Calif., Griffith Co., Los Angeles Railway Bldg., Los Angeles, Calif., Peter Kiewit & Sons Co., Hill Field, and Morrison-Knudsen Co. Inc., 319 Bway., Boise, Idaho. Est. **$11,200,000.** CD 6/8—ENR 6/11.

★**†Washington**—Vancouver Housing Auth., Vancouver, housing, for NHA, to George H. Buckler Co., Lewis Bldg., Portland, Ore., **$4,000,000.** Wolff & Phillips, Railway Exch. Bldg., Portland, Ore., archts. CD 6/10—ENR 6/18.

★**†Wisconsin** — U. S. Eng., Federal Bldg., Milwaukee, bldgs., No. 1095—eng. 138, to Bentley Const. Co., 4622 W. Port Washington Rd., Milwaukee***fence lighting sys., transmission line, No. 1095—eng 139, to Harland Electric Co., Inc., 509 N. Lake St., Madison***ex-cav. and machine back filling for sewer, to Bowen & McLoughlin-Birch Constr. Co., Ford Bldg., Great Falls, Mont.***2 bldgs., to Wolfes-Jensen & Co., 127 N. Dearborn St., Chicago, Ill.

Man., Winnipeg—Dpt. National Defense, Ottawa, Ont., 5 storage bldgs. at No. 7 Equipment Depot, to Coutre & Toupin, Montreal Trust Bldg. **$81,000.**

★**Ont., Hamilton**—Wartime Housing, Ltd., 55 York St., Toronto, 450 family dwellings, to W. H. Yates Constr. Co. Ltd., 400 Wellington St. N. About **$900,000.** CD 6/5—ENR 6/11.

★**Ont., Stoney Point (Ravenswood)**—Secy. Dpt. Munitions & Supplies, Ottawa, 36 camp bldgs., Ravenswood, to Johnson Brothers Co. Ltd., 43 Market St., Brantford, about **$700,000.**

★**Que., L'Acadie**—Dpt. Munitions & Supply, Ottawa, Ont., munitions plant, to H. J. O'Connell, 606 Cathcart St., Montreal, Que. About **$10,000,000.** CD 5/28—ENR 6/4.

COMMERCIAL BUILDINGS

PROPOSED WORK

Me., South Portland (br. Portland)—Parent Homes, Inc., Parent St., South Berwick, plans by Ames & Sheehan, 79 High St., Somersworth, N. H., 45 homes. **$175,000.**

★**N. J., Cranford**—J. H. Shaheen, 2 Franklin Ave., plans by H. Irving Braun, 191 Broadway, Long Branch, one hundred seventy—three 2½ story, bsmnt., frame homes, Heinning Ave. $692,000.

CONTRACTS AWARDED

★**Calif., Long Beach**—Artcraft Building Co., 6900 South Western Ave., Los Angeles, dwelling, triplex apartment bldgs., and duplex bldgs. Owner builds. Over **$500,000.**

Calif., Long Beach—Rand Constr. Co., 6239 Wilshire Blvd., Los Angeles, 81 dwellings, near Carson St. and Cherry Ave. Owner builds. Over **$150,000.** W. Neff, 5927 Franklin Ave., Los Angeles, archt.

Calif., Richmond—H. L. Crocker & Co., 30 Wilding Lane, Oakland, homes, Rd. 17 between Wildcat and San Pablo Creeks and between 23 and 13 Sts., Richmond area. Owner builds. Over **$150,000.**

Calif., San Rafael — Chas. Lund & Lloyd Grandi, 1314 4 St., (1st unit) 50 homes, (ultimately 250 homes) W. 5 St., to C. Sullivan, 162 Walnut St., Santa Rosa. Est. over **$150,000.** Awarded 6/17.

★**Conn., Bristol**—Pre-Dem Constr. Co., 20 E. 1 St., Mount Vernon, N. Y., housing. Owner builds. **$600,000. (Correction**—owner's address.) CD 6/5—ENR 6/11, under CA.

Conn., New Haven—T. F. Reilly, 185 Main St., East Haven, housing units, Beverly Hills at Fountain St. Owner builds. **$150,000.**

★**Conn., Milford**—Winston Constr. Co., N. K. Winston, 22 W. 48 St., New York, N. Y., housing. Owner builds. **$1,000,000.**

Conn., Stamford—Charles and Walter Maguire, 322 Main St., twenty 4 family frame, brick, stone houses. Owner builds. **$150,000.** A. Vacca, 1 Bank St., archt. CD 3/31—ENR 4/2.

Mo., St. Louis—E. J. Kidd Const. Co., 6318 W. Florissant Ave., thirty 27x31 ft., brick bungalows, rock fdns., 8500 block, Partridge Ave., to V. Sowins, 2044 Coleridge Ave. Est. approx. **$150,000.**

N. J., Manville—Owner, c/o H. D. May & H. R. Bowden, archts. 15 E. 40 St., New York, N. Y., 48 one story, 20x30 ft. homes, to Schweers & Smith, Inc., 5 E. 44 St., New York, N. Y., $192,000.

★**N. J., New Milford** — Security Home Builders, 999 River Rd., two hundred 1½ story, bsmnt., brick veneer, frame homes, River Rd., separate contracts. **$800,000.** C. K. Loren, 119 Rock Rd., Glen Rock, archt.

N. J., Raritan—Amboy Homes Inc., Jackson Ave., 48 one and two story, bsmnt. homes, Jackson Ave., to Amboy Constr. Co., Jackson Ave., Perth Amboy **$336,000.** L. G. Feinen, 717 Cedar Lane, Teaneck, archt.

★**Pa., Chester** — F. A. Collins, Chester, housing, Green Ridge, Aston Twp., suburb of here. Owner builds. Over **$535,000.**

Pa., Phila.—Phila. National Bank, 417-419 Chestnut St., Philadelphia National Bank, alterations, addn., to Steel, Fownall & Gebhardt, 1316 Arch St. Over **$150,000.**

Pa., Pittsburgh—Eagle Certified Homes, Inc., c/o A. Palermo, 5850 Forbes St., sixty-eight 2 story, bsmnt., 22 x 26 ft., brick veneer residences, separate contracts. **$408,000.**

Tenn., Spring Hill—A. M. Hill Co., 715 Market St. houses. Owner builds. **$200,000.**

INDUSTRIAL BUILDINGS

PROPOSED WORK

★**Connecticut**—FACTORY—Industrial Company, revising plans brick, steel factory unit. $1,000,000. Mylchreest & Reynolds, 230 Palm St., Hartford, engrs. CD 6/1—ENR 6/4.

O., Jefferson—PLANT—Cozier Wood Package Co., Jefferson, F. D. Elderkin, mgr., 1 story, brick, steel, concrete plant addn. $40,000.

Pa., Kane—PLANT—Speer Carbon Co., St. Marys, altering, imprv., constructing addns., former Albertson Co. plant. Over $40,000 with equip.

Pa., Phila. — FOUNDRY — Bradlee & Co., 1615 N. Delaware Ave., altering foundry.

Pa., Phila.—FOUNDRY — Fairmount Foundry, 3 and Westmoreland Sts., plans by E. Schoefpe, 1602 Spruce St., foundry.

R. I., Woonsocket — FACTORY — French Worsted Co., 153 Hamlet Ave., brick textile plant addn. $40,000. Walter F. Fontaine, Inc., 285 Main St., archts.

R. I., Woonsocket—BOILER PLANT—Woonsocket Rayon Co., Clinton St., soon lets contract, 40x50 ft., brick boiler plant. $40,000. Jenks & Ballou, 2600 Industrial Trust Bldg., Providence, engrs. CD 6/16—ENR 6/18.

★**Tex., Denison**—REFINERY PLANT—Bell Oil & Gas Co., and Ben Franklin Refining Co., Denison, bids soon, high-octane refinery plant. $800,000.

Wis., La Crosse—PLANT—Swift & Co., 4115 S. Packers Ave., Chicago, Ill., soon lets contract 1 story, 43x83 ft., brick plant, concrete fdn. A. M. Ives, c/o owner, engr.

★**Que., Cornwall** — PLANT — Secretary Dpt. Munitions & Supply, Ottawa, Ont., bids soon, plant bldgs., Stormont Works, Highway 2. About $2,000,000 equipped.

BIDS ASKED

Pennsylvania—PLANT—American Radiator & Standard Sanitary Corp., G. M. Maier, asst. vice pres. in charge, Bessemer Bldg., Pittsburgh, general contract mfg. plant. $60,000.

Pa., Phila.—PLANT—I.T.E. Circuit Breaker Co., Hamilton St., altering and constructing 8 story plant addn., Hamilton St. between 18 and 19 Sts. J. Fletcher Spreel, 1120 Locust St., archt. W. H. Gibson, Architects Bldg., H. E. Baton, Inc., 1717 Sanson St., J. S. Cornell & Son, 1528 Cherry St., Smith & Buzby, 2020 Chancellor St., engrs.

Pa., Pittsburgh — FACTORY, etc. — Acme Stamping & Mfg. Co., C. A. Kays, pres., 201 Corliss St., general contract 2 story, bsmnt., 30x90 ft., brick, tile factory and office addn. $40,000. Braziell & Farrell, 310 Magee Bldg., archts.

Sask., Moose Jaw—PLANT—British American Oil Co., Ltd., Royal Bank Bldg., Toronto, Ont., plant addn., etc.

CONTRACTS AWARDED

Ia., Council Bluffs—PLANT—Orwald Railroad Service Co., Council Bluffs, plant. Owner builds. **$45,000.**

Me., South Portland (br. Portland)—TERMINAL—Portland Terminal Co., 222 St. John St., Portland, freight terminal, spur track, storage facilities, to A. C. Stanley Co., Inc., 34 Columbia Rd., Portland. **$120,000.**

Mass., Pittsfield—FACTORY—General Electric Co., Morningside St., 4 story, concrete, steel factory addn., alterations, to Lindholm Constr. Co., Inc., 1277 East St. Est. over **$40,000.** CD 5/8—ENR 5/14.

★**Mich., Detroit**—FACTORY—Budd Induction Heating Co., Inc., 12141 Charlevoix Ave., 1 story, brick, steel factory, concrete fdns., to Fullerton Constr. Co., 11733 Russell St., Est. about **$500,000.** CD 4/15—ENR 4/23.

Mo., St. Louis — FREIGHT TERMINAL — Tri-State Motor Transport, Inc., 1516 N. 14 St., St. Louis, 1 story, 50x160 ft., brick, concrete freight terminal, concrete fdns., 1015 N. Market St., to J. J. Burke, 4 and Maiden Lane, Joplin. Est. **$40,000** with equip. A. J. Richardson, Miners Bank Bldg., Joplin, archt.

Mo., Sedalia—PLANT — Universal Concrete Pipe Co., 297 S. High St., Columbus, O., plant, to C. G. Schrader & W. C. Cramer, Sedalia. Est. **$100,000** with equip.

N. J., Maplewood—PLANT—Universal Chair Co., Inc., 92 Burnett St., 1 and 2 story, bsmnt., 70x162 ft. brick plant addn. to Frank D. Trainor & Son, Inc., 12 Smith St., Irvington. **$45,000.** V. Strombach, 1243 Springfield Ave., Irvington, archt. and engr.

N. J., Union—WAREHOUSE—A. B. Murray Co., Inc., 145 Woolcott St., Brooklyn, N. Y., 1 story, 82x360 ft. warehouse, and 2 story, 30x40 ft. office, prefabricated steel, rein.-con., Green Lane, to Geiger Eng. & Mfg. Co., 300 Burnett Ave., **$80,000.** E. Geiger, 300 Burnett Ave., archt.

N. Y., Lyons — PLANT — Dry Pack Corp., Lyons, 25x35 ft., 24x40 ft. and 28x36 ft., all 1 story, plant addns., Canal St., separate contracts. **$45,000.** CD 6/9—ENR 6/11.

O., Cleveland—FACTORY—Locke Machine Co., H. G. Smith, pres., 971 E. 53 St., 1 story, 428x114 ft., brick, steel factory addn., to J. L. Hunting Co., Ninth Chester Bldg. Est. **$40,000.** F. Hauska, Ninth Chester Bldg. engr. Awarded 6/16. CD 2/11/40—ENR 2/20/41.

O., Cleveland—PLANT—National Bronze & Aluminum Co., J. L. Schmeller, pres., 8800 Lakes Ave., 1 story, 66x87 ft., brick, rein.-con. heat treating plant, to H. L. Yokes Co., 5300 Chester Ave. Est. **$40,000.** Awarded 6/16. A. R. Simon, 5300 Chester Ave., engr.

O., Cleveland—FACTORY—Pal-Vin Machine & Mfg. Co., J. Juliand, pres.-treas., 1413 E. 40 St., 1 story, 65x100 ft. brick, timber factory, to Mitzel Co., 1836 Euclid Ave. Est. **$40,000.** Awarded 6/17. D. M. Ward, 8863 Bway., engr. CD 4/15—ENR 4/23.

O., Cleveland—SERVICE, etc.—Warner & Swasey Co., C. Stillwell, pres., 5701 Carnegie Ave., 1 story, part bsmnt., 57x290 ft., brick, steel, service and cafeteria bldg., to Sam W. Emerson Co., 1836 Euclid Ave. Est. **$150,000.** Awarded 6/16. Osborn Eng. Co., 7016 Euclid Ave., engrs.

O., Elyria—FACTORY—Ridge Tool Co., Elyria, factory alterations, addns., to Mitzel Co., 1836 Euclid Ave., Cleveland. Est. **$100,000.** A. G. Hall, 836 Brunswick Rd., Cleveland, archt. Awarded 6/16.

★**Pennsylvania**—PLANT—Industrial Company, plant bldgs., to Pittsburgh Industrial Engineering Co., 3939 Butler St., Pittsburgh. Est. **$500,000** to **$1,000,000.**

Pennsylvania—POWER PLANT—Industrial Company, power plant, to Rust Eng. Co., Clark Bldg., Pittsburgh.

Pa., Bessemer—TOWER BUILDING—Union R. R. Co., Frick Bldg., Pittsburgh, H. A. Sayre, ch. engr., Linden Ave., East Pittsburgh, 4 story, bsmnt., brick on hollow tile tower bldg., to Wm. Pearson Constr. Co., 203 Investment Bldg., Pittsburgh. Est. **$40,000.** Bids 6/5. CD 6/1—ENR 6/4.

Pa., Ellwood City—FACTORY—Aetna Standard Eng. Co., C. H. Ohlson, chg. Home Savings & Loan Bldg., Youngstown, O., 1 story, 60x150 ft., brick, steel, factory addn. to Warren Eng. Co., 402 Atlantic St. N.W., Warren, O. Est. **$40,000.** CD 1/29—ENR 2/5.

Pa., Phila.—MACHINE SHOP, etc.—Midvale Co., 4320 Wissahickon Ave., 2 story, 25x66 ft., brick, steel machine shop, bath house, to Murphy Quigley & Co., 54 St. and City Ave. **$150,000.** CD 5/6/41—ENR 5/8/41.

Pa., Washington—PLANT—Jessop Steel Co., R. J. Murray, secy. in charge, Washington, 1 story, 135x160 ft., steel, concrete mfg. plant, separate contracts. **$50,000.**

Wis., Whitehall—FACTORY—Illinois Cooperage Mfg. Co., 220 S. State St., Chicago, Ill., 1 story, 60x100 ft. factory, to John Schneider, Independence.

Alta., Edmonton—PLANT—Canada Packers, Ltd., Fort Rd. and 70 St., 48x80 ft., brick plant addn., concrete fdn., to Poole Constr. Co., Ltd., Tegler Bldg., Edmonton. **$225,200.** Rule, Wynn & Rule, Birks Bldg., archts. CD 10/9—ENR 10/16.

Man., Winnipeg—PLANT—MacDonald Bros. Aircraft Ltd., 50 Robinson St., plant addn., to Fraser MacDonald & Co. Ltd., 911 Somerset Bldg. **$127,000.** Northwood & Chivers, Nanton Bldg., archts.

Ont., Hamilton—REPAIR SHOP—Hamilton & Buffalo Ry. Co., Hunter St. E., rebuilding car repair shop, to W. H. Cooper Constr. Co., Ltd., Medical Arts Bldg. **$45,000.**

★**Que., La Tuque**—PLANT—St. Maurice Power Corp., 167 Craig St. W. Montreal, power development, (5th unit) to Shawinigan Eng. Co., Ltd., 107 Craig St. W., Montreal, Que., about **$1,000,000.**

★**Que., Rapide Blanc**—SWITCHING STATION GENERATOR, etc.—Shawinigan Water & Power Co., Ltd., 107 Craig St. W., Montreal, generator, turbine, in switching station, to Shawinigan Eng. Co., Ltd., 107 Craig St. W., Montreal, about **$1,000,000.** Awarded 6/16.

Ont., Toronto—PLANT—International Aeronautical Corp., Ltd., 289 Sumach St., plant, 8-12 Sword St., to Wm. Halliday & Son, 271 Forest Hill Rd. About **$60,000** incl. equip. CD 5/28—ENR 6/4.

Ont., Windsor—PLANT—J. C. Pennington, archt., Bank of Commerce Bldg., 1 story, brick plant addn., for Dominion Twist Drill, Ltd., 1858 Assumption St., Walkerville, to Woodall Bros., 1922 Wyandotte St. E., Walkerville, about **$148,000.** CD 6/9—ENR 6/11.

Que., Lachine—CASTING SHOP—Canada Strip Mill Co., Ltd., and Dpt. Munitions & Supply, Ottawa, Ont., 1 story, 120x250 ft., steel, brick casting shop, concrete fdn., to Carter-Halls-Aldinger Co., Ltd., 419 Cherry St., Toronto, Ont. **$350,000.**

OFFICIAL PROPOSALS

Official notices of bids wanted on construction and related work, equipment and material for government, state, municipal departments and private enterprises

RATE: THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION
COPY RECEIVED UP TO 12 NOON TUESDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST MINUTE ADS
SEND COPY TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK, N. Y.

Bids: July 8 (972)

Water Main

72 INCH WATER MAIN
WAR PUBLIC WORKS PROJECT
DOCKET NO. MICHIGAN 20-185
FOR THE
DEPARTMENT OF WATER SUPPLY
CITY OF DETROIT, MICHIGAN
CONTRACT NO. DM-1

Sealed proposals for constructing 72" water main together with all appurtenances and related structures in Belton Avenue and Meyers Road, addressed to the Board of Water Commissioners of the City of Detroit, and endorsed, "Proposal for Contract No. DM-1", will be received at Room 506 Water Board Building, 735 Randolph St., Detroit, Michigan, until 10:00 A.M., Eastern War Time, July 8, 1942, at which time and place they will be publicly opened and read aloud. Any proposal received after the above mentioned time will be returned to the bidder unopened.

The work included consists of furnishing all material, other than that specifically excepted in the specifications or plans, all labor, plant and equipment for constructing approximately 3946 lineal feet of 72" Steel Shell Reinforced Concrete Pressure Pipe water main together with all appurtenances and related structures.

The Contract Documents, including Notice to Bidders, Form of Proposal and Contract, Plans and Specifications may be examined, during business hours, at the office of the Department of Water Supply, Room 706 Water Board Building, Detroit, Michigan, and may be obtained upon making a deposit of Ten Dollars per set, which sum will be refunded upon the return of the complete Contract Documents in good condition within thirty (30) days after the contract is awarded, or if used in making a bona-fide proposal.

Each proposal shall be accompanied by a certified check or a satisfactory bidder's bond in the amount of at least five (5%) per cent of the total lump sum price bid, drawn payable to the City of Detroit, Board of Water Commissioners, as security for the proper execution of the Contract.

No proposal may be withdrawn for at least sixty (60) days after the scheduled closing time for receipt of bids.

The Board of Water Commissioners reserves the right to waive any informality in any bid or to accept any bid or to reject any or all bids, should it deem it to be for the best interest of the City of Detroit to do so.

CITY OF DETROIT
BOARD OF WATER COMMISSIONERS
Elmer P. Grierson, President
Douglas Dow, Vice-President
Oscar A. Wagner
Adam F. Brzezinski
LAURENCE G. LENHARDT,
General Manager and Chief Engineer.
E. H. BAUER,
Acting Secretary.

Bids: June 29 (974)

Concrete Work Superstructure

CHEMICAL BUILDING
SOUTH DISTRICT FILTRATION PLANT
CITY OF CHICAGO
CHICAGO, June 10, 1942.

Sealed proposals will be received by the City of Chicago until 11 A.M., Monday, June 29, 1942, at Room 406 City Hall, for the construction of the reinforced concrete framework, bins, and other incidental and adjacent work for the Chemical Building at the South District Filtration Plant, located in the vicinity of East 79th Street and Lake Michigan, Chicago, Illinois, including the concrete work for the observation corridors, retaining walls, shops, offices, store rooms, control laboratory, control room, lobby, terrace, loading platform and stairs, also the furnishing and setting of miscellaneous metal work, electrical conduit and fittings, etc., according to plans and specifications on file in the office of the Department of Public Works of said City, Room 406 City Hall.

Proposals must be made out upon blanks furnished at said office, and be addressed to said Department, indorsed "Proposal for Concrete Work, Superstructure, Chemical Building, South District Filtration Plant," and be accompanied with Ten Thousand Dollars ($10,000.00) in money or a certified check for the same amount on some responsible bank located and doing business in the City of Chicago and made payable to the order of the Commissioner of Public Works.

Plans and specifications may be obtained upon payment of Ten Dollars ($10.00) for each set, which will be refunded upon the return of said plans and specifications in good condition within thirty (30) days after the opening of bids. Desposits to be in the form of money or certified check.

In accordance with the provisions of the Act of the General Assembly of the State of Illinois, entitled "An Act regulating wages of laborers, mechanics and other workmen employed under contracts for public works," approved June 26, 1941, the general prevailing wage rates for work at the construction site are set forth in the specifications.

The Commissioner of Public Works reserves the right to reject any or all bids.

No proposal will be considered unless the party submitting the same shall furnish evidence satisfactory to the Commissioner of Public Works of ability, and the possession of the necessary facilities, together with sufficient pecuniary resources, to fulfill the conditions of the contract and specifications.

OSCAR E. HEWITT,
Commissioner of Public Works.

Bids: July 8 (973)

Water Main

72 INCH WATER MAIN
WAR PUBLIC WORKS PROJECT
DOCKET NO. MICHIGAN 20-185
FOR THE
DEPARTMENT OF WATER SUPPLY
CITY OF DETROIT, MICHIGAN
CONTRACT NO. DM-2

Sealed proposals for constructing 72" water main together with all appurtenances and related structures in Meyers Road from Belton Avenue to West Chicago Avenue, addressed to the Board of Water Commissioners of the City of Detroit, and endorsed, "Proposal for Contract No. DM-2", will be received at Room 506 Water Board Building, 735 Randolph St., Detroit, Michigan, until 10:00 A.M., Eastern War Time, July 8, 1942, at which time and place they will be publicly opened and read aloud. Any proposal received after the above mentioned time will be returned to the bidder unopened.

The work included consists of furnishing all material, other than that specifically excepted in the specifications or plans, all labor, plant and equipment for constructing approximately 3956 linear feet of 72 inch and 96 linear feet of 48 inch Steel Shell Reinforced Concrete Pressure Pipe water main together with all appurtenances and related structures.

The Contract Documents, including Notice to Bidders, Form of Proposal and Contract, Plans and Specifications may be examined, during business hours, at the office of the Department of Water Supply, Room 706 Water Board Building, Detroit, Michigan, and may be obtained upon making a deposit of Ten Dollars per set, which sum will be refunded upon the return of the complete Contract Documents in good condition within thirty (30) days after the contract is awarded, or if used in making a bona-fide proposal.

Each proposal shall be accompanied by a certified check or a satisfactory bidder's bond in the amount of at least five (5%) per cent of the total lump sum price bid, drawn payable to the City of Detroit, Board of Water Commissioners, as security for the proper execution of the Contract.

No proposal may be withdrawn for at least sixty (60) days after the scheduled closing time for receipt of bids.

The Board of Water Commissioners reserves the right to waive any informality in any bid or to accept any bid or to reject any or all bids, should it deem it to be for the best interest of the City of Detroit to do so.

CITY OF DETROIT
BOARD OF WATER COMMISSIONERS
Elmer P. Grierson, President
Douglas Dow, Vice President
Oscar A. Wagner
Adam F. Brzezinski
LAURENCE G. LENHARDT,
General Manager and Chief Engineer.
E. H. BAUER,
Acting Secretary.

Bids: July 14 (978)

Pumping Equipment

THE PORT OF NEW YORK AUTHORITY
LINCOLN TUNNEL
NORTH TUBE
CONTRACT MHT-64

Sealed proposals for the above work will be received at the office of the Executive Director of The Port of New York Authority, Number 111 Eighth Avenue, Borough of Manhattan, New York City, until 10:30 o'clock, on the morning of Tuesday, July 14, 1942, and thereafter in the Auditorium in the office of the Port Authority at the same address until 11:00 A.M., on the same date, at which latter time and place said proposals will be publicly opened and read.

Contract documents may be seen at the office of the Chief Engineer, The Port of New York Authority, Room 1538, 111 Eighth Avenue, New York City, and copies will be furnished upon deposit of $25.00 per set. The deposit will be remitted if the documents are returned in good condition, not later than sixty days after the opening of proposals.

THE PORT OF NEW YORK AUTHORITY
Frank C. Ferguson,
Chairman

(U. S. Government)

TENNESSEE VALLEY AUTHORITY, KNOXVILLE, TENNESSEE. Sealed bids, in duplicate, will be received until 10.00 A. M., Central War Time, July 10, 1942, and then publicly opened, for constructing a stabilized crushed stone base and a bituminous surface course for roads in the South Holston and Fort Loudoun Reservoir Areas. The work will be divided into two contracts for each of which the work is described below. Requisition 337004. South Holston Area—Principal Access Road to South Holston Dam—length 3.0 miles. Construction in accordance with specification No. 2083. There will be no drawings. Requisition 337028. Fort Loudoun Area—Fourteen sections of county roads along the north side of the Tennessee River in Knox County, Tennessee—total length 7.8 miles. Construction in accordance with specification No. 3015 and drawing mantioned therein. Each contract will include the furnishing of all labor, materials, equipment, and supplies. Drawing showing the work under requisition 337028, and specifications and bidding documents for both requisitions, may be obtained without charge on or after June 22, 1942, from the office of the Director of Purchases, Old Post Office Building, Knoxville, Tennessee. The drawing may be examined for bidding purposes, on any days except Sundays or holidays, either at the office of the Director of Purchases, or at the office of the Head Highway Engineer, Arnstein Building, Knoxville, Tennessee. Requests for bidding documents must be identified by requisition number. C. H. Garity, Director of Purchases. (979)

(For additional U. S. Government Advertisements see page 24)

SEARCHLIGHT SECTION

EMPLOYMENT OPPORTUNITIES

RATE: 10 CENTS A WORD, MINIMUM CHARGE $2.00

Positions Wanted (full or part-time salaried employment only), ½ the above rates, payable in advance.

Box Numbers in care of any of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads.

Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

Copy for new advertisements received until 10 A. M. Friday for Thursday's Issue

EXAMINATION NOTICE

STATE OF CONNECTICUT
PERSONNEL DEPARTMENT
POSITIONS STATE HEALTH DEPARTMENT: Junior Sanitary Engineer, No. 356, $1800-$2340 per annum.
RESIDENCE: no restrictions.
APPLICATION FORMS and detailed information may be obtained from the Personnel Department, State Capitol, Hartford. Last date for filing is July 8, 1942.
DATES OF EXAMINATIONS: between July 15, 1942 and August 15, 1942.

POSITIONS VACANT

These Positions Vacant advertisements are published subject to agreement by the advertisers not to consider applicants now employed on war work unless they obtain written release from present employer.

MECHANICAL AND REINFORCED CONCRETE Design Engineers on Steel Plant Construction wanted. Location Cleveland. Salary. Give full particulars and salary in first letter. Apply Construction Engineer, American Steel & Wire Co., Rockefeller Bldg., Cleveland, Ohio.

STRUCTURAL DETAILERS, accurate and fast workers for Mill buildings and Bridges. Steady work with plenty overtime. State experience and rate. Summer Engineering Co., 239-4th Ave., Pittsburgh, Pa.

GRADUATE CIVIL ENGINEERS—preferably with from two to five years general experience as field engineers in connection with Water Waste Surveys, Distribution Studies and Trunk Main Surveys of Municipal Water Distribution Systems. The Pitometer Company, Inc., 50 Church St., New York City, N. Y.

EXPERIENCED DESIGNING ENGINEER wanted for line of centrifugal and plunger pumps. A man who is able to create as well as design. A responsible and steady position to right man with small manufacturer in Metropolitan area. In reply give full particulars, including salary desired. P-823, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

Clerical, Payroll, Timekeeping, Purchasing, and accounting force for large construction work in Virginia. Write immediately. P-854, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

SUPERINTENDENT. For war project on Pacific Coast. Must be thoroughly familiar with shovel work using narrow gauge hauling equipment. Reply giving experience, references and salary required to Tomlinson Construction Co., Ltd., 21 King St., E. Toronto, Canada.

CONTRACTORS ENGINEER — Young graduate engineer for all around outside building work on 1½ yr. project. Prospect of later inside permanent connection, Western Penna. Reply P-852, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

POSITION VACANT

ESTIMATOR JOB EXPEDITOR for building contractor. This is a key position with a small growing company and requires a man with thorough experience in pricing work and familiar with federal contracts and procedure. Give full particulars and salary in first letter. P-859, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

POSITIONS WANTED

(See also "Selling Opportunity Wanted")

CIVIL ENGINEER; Graduate; 33 years experience; design; construction; Industrial plants; Water supply; Hydro-electric developments. PW-843, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

YOUNG CANADIAN Mechanical Power Engineer desires position Alaska Highway. Qualifications Airmailed on request. PW-816, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

INSTRUMENTMAN, Age 35, single. Can go anywhere immediately on notice. Experience record gladly sent. Draft classification 1-B. Write Box 78, Bandana, North Carolina.

LAYOUT ENGINEER, Office Engineer or Estimator. 8 years Construction experience on Building, tunnels, earthwork, munition depot, warehouse, etc. Age 30. 3-A Classification. 2½ years Engineering School. PW-830, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

ASPHALT PAVING SUPERINTENDENT, 30 years experience. 56 years of age. PW-838, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

ENGINEER, with considerable experience on re-inforced concrete and steel desires a permanent position in New York City. PW-839, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

BUILDING CONSTRUCTION MANAGER—20 years experience. Age 53. Thoroughly familiar estimating, purchasing, sub-contracts correspondence, office and field work. Now completing five million dollar industrial projects. PW-850, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

EXECUTIVE ENGINEER. Graduate, registered in Michigan, 33 years experience in design and in field on both heavy construction and building work, last 2 years on Navy projects. 1½ years in Navy Civil Engineer Corps in last war. Desires position as project engineer in charge of design and field work. PW-853, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CONSTRUCTION ENGINEER — Age 35. Ten years experience on highways, bridges, airports, dams, spillways, tunnels, power house, transmission lines, and surveys. Familiar with construction methods, standards, and estimates. Any location. P.O. Box 473, Montrose, Pa.

POSITIONS WANTED

CONSTRUCTION SUPERINTENDENT-ENGINEER. Wide experience engineering construction with contractors. Excavation, paving, reinforced concrete, sewers, disposal, waterworks, utility underground work, general construction. Experience Government inspection, supervision, checking of contracts. Competent knowledge of contracts and specifications. Know labor and equipment organization and handling. Graduate engineer, age 47. Available short notice. Consider short or long jobs. PW-898, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

CONSTRUCTION SUPERINTENDENT, project manager, graduate Civil Engineer. 25 years experience various types structures, industrial, commercial, housing, public works. Recent cantonment, Navy structures. PW-827, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CHIEF ENGINEER, Chief Estimator; thirty years contracting experience; past two on large Army and Navy Projects. PW-855, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

STRUCTURAL DRAFTSMAN—junior designer whose employment is about to terminate desires employment. Good on concrete or wood; fair only on steel detailing. College graduate entitled to state license as civil engineer. PW-856, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

STRUCTURAL DESIGNER. Steel and reinforced concrete commercial and industrial buildings, power plants etc. Expert stress analyst. Up to date on both riveted and welded steel construction. Initiative, originality, practical engineering sense and an instinct for economical lay-out and design. Adaptable to aircraft or ship building. Small fabricating plant interested in developing patentable improvements in structural assemblies would be favorably regarded. PW-857, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CONSTRUCTION ENGINEER — MANAGER: Thirty-two years wide experience supervision and design architectural and engineering structures, making estimates, letting sub-contracts and general contracts. At present, General Manager of large contracting company. Experienced in Government procedure, defense work, housing projects, miscellaneous industrial plants. Thorough in concrete and steel construction, also design. Agreeable, reliable and efficient. Can handle any type construction operation. Registered. PW-858, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

OPPORTUNITY WANTED

SALES REPRESENTATIVE — located with office in Philadelphia—would like to represent three or four manufacturers in territory comprising Eastern Pennsylvania, Southern New Jersey and Delaware. Experienced. Can furnish references. O. A. C. Gustafson, Commercial Trust Building, Room 1245.

TO EMPLOYERS who advertise for MEN . . .

THE letters you receive in answer to your advertisements are submitted by the applicants with the hope of securing the position offered.

Frequently when there are many applicants, the only letters acknowledged are those of the most promising candidates. Others may not even receive the slightest indication that their letters have been received, much less considered. These men often become discouraged, will not respond to future advertisements and sometimes even question their bona fide character.

Every advertisement printed in the searchlight section is duly authorized.

It will help to keep readers interested in this advertising if you will make it a practice to acknowledge every application received, even if you merely return the letters of unsuccessful applicants marked, "Position filled, thank you." If you don't care to reveal your identity, you might mail them in plain envelopes.

This suggestion is made in a spirit of friendly co-operation between employers and the men replying to Positions Vacant advertisements.

Departmental Staff, McGRAW-HILL PUBLISHING CO., Inc.

"Put yourself in his place."

OFFICIAL PROPOSALS—(U. S. GOVERNMENT)

SEALED BIDS, INDORSED "Bids for capstans, specification no. 10906," will be received until 11 a.m., Jul. 1, 1942, at the Bureau of Yards and Docks, Navy Department, Washington, D. C., and then and there publicly opened for *electrically-operated dry dock capstans*, for Naval Dry Docks, Hunters Point, Calif., Roosevelt Base, Terminal Island, Calif., and Balboa, C. Z. Specification no. 10906 and accompanying drawings may be obtained on application to Bureau or to Commandant, Twelfth Naval District, Federal Office Building, Civic Center, San Francisco, Calif. Deposit of check or postal money order for $10.00 payable to Chief of Bureau of Yards and Docks, is required as security for safe return of drawings and specification. B. MOREELL, Chief of Bureau, June 2, 1942. (971)

(D. C. Government)

W.P.W. PROJECT NO. D.C. 49-101, COMMISSIONERS OF THE DISTRICT OF COLUMBIA, WASHINGTON, D. C. Separate sealed bids for 30-inch diameter *Trunk Watermain from 18th Street and Minnesota Avenue to Firth Sterling Avenue and Stevens Road, S.E.*, will be received by said Commissioners at Room 509, District Building, Washington, D. C., until 2 o'clock P.M., July 7, 1942 and then publicly opened and read aloud. The Instructions to Bidders, Form of Bid, Form of Contract, Plans, Specifications and Forms of Bid Bond and Performance Bond may be examined and secured at the office of the Chief Clerk, Engineer Department, Room 427, District Building, and copies thereof obtained upon payment of $10.00 for each set. Upon returning such sets promptly and in good condition, said deposits will be refunded. The Commissioners reserve the right to waive any informalities in or to reject any or all bids. Each bidder must deposit with his bid security in an amount not less than five per centum (5%) of the base bid in the form and subject to the conditions provided in the Instructions to Bidders. Time will not be a material factor in evaluating bids. (See paragraph 17 of Instructions to Bidders.) Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wage rates to be paid under the contract. No bidder may withdraw his bid within thirty (30) days after the actual date of the opening thereof. G. M. THORNETT, Secretary, Board of Commissioners, D. C. June 15, 1942. (976)

(D. C. Government)

COMMISSIONERS, D. C., June 15, 1942. Sealed proposals will be received at Room 509, District Building, until 2:00 P. M., July 7, 1942, and then publicly opened, for furnishing the materials and performing the work for the construction of 30-inch diameter *concrete trunk watermain* and appurtenances in *South Capitol Street, Overlook Avenue, and Fourth Street, Southwest*. All prospective bidders are hereby notified that any bid submitted in response to this advertisement must be accompanied by a statement of facts in detail of the business and technical organization of the bidder available for the contemplated work, including his financial resources. The Commissioners expressly reserve the right to reject any bid in which the facts as to the business and technical organization, financial resources or experience compared with the project bid upon and based upon past known performance of the bidder justify such rejection. Certified check for $10.00, payable to the Collector of Taxes, D. C., to insure return in good condition, should accompany each request for proposals, specifications, and drawings, to the Chief Clerk, Engineer Department, Room 427 District Building. (977)

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ENGINEERING NEWS - RECORD CONSTRUCTION DAILY, 330 W. 42nd St., New York, N. Y.